

American Experiments:
Science, Aesthetics, and Politics in Clinical Practices of Twentieth-Century American
Literature

by

Lindsey Catherine Andrews

Department of English
Duke University

Date:_____

Approved:

Priscilla Wald, Co-supervisor

Robert Mitchell, Co-supervisor

Fred Moten

Robyn Wiegman

Sean Metzger

Dissertation submitted in partial fulfillment of
the requirements for the degree of Doctor
of Philosophy in the Department of
English in the Graduate School
of Duke University

2013

ABSTRACT

American Experiments:
Science, Aesthetics, and Politics in Clinical Practices of Twentieth-Century American
Literature

by

Lindsey Catherine Andrews

Department of English
Duke University

Date: _____

Approved:

Priscilla Wald, Co-supervisor

Robert Mitchell, Co-supervisor

Fred Moten

Robyn Wiegman

Sean Metzger

An abstract of a dissertation submitted in partial
fulfillment of the requirements for the degree
of Doctor of Philosophy in the Department of
English in the Graduate School of
Duke University

2013

Copyright by
Lindsey Catherine Andrews
2013

Abstract

This dissertation is concerned with the relationships between experiments in literature, science, and politics in twentieth-century United States culture. I argue that the three can be considered together by understanding “experimentation” as a set of processes rather than a method, and highlighting the centrality of writing and reading to experiments in all three arenas. Drawing on scientist Ludwik Fleck’s concept of “valuable experiments,” I read specific experiments in each field in conversation with the others, highlighting the ways in which science and politics require aesthetic structures, the ways in which science and literature reconfigure politics, and the ways in which politics and literature can intervene in and reconfigure scientific practices. Ultimately, I try to develop a reading practice that can make visible the shared transformative capacities of science, literature, and radical politics.

In the course of three chapters, I analyze the formal and conceptual innovations of writers such as William Burroughs, Ralph Ellison, and Carson McCullers, who were intimately affected by the uses of experimental science in corrective institutional practice. In doing so, I develop a concept of “experimental literature” that is distinct from avant-garde literature and can account for the investments that these writers share with scientists such as Albert Hofmann, Albert Einstein, and Margaret Mead. I argue that experimental writers denature literary genres that depend on coherent subjects,

transparent reality, and developmental progress in order to disrupt similar assumptions that underpin positivist science. By understanding valuable experimental science and writing as continuous challenges to standardized scientific knowledge, I show how these writers contribute to ongoing radical social projects of queer and black radical traditions—such as those of George Jackson and the Combahee River Collective—which are grounded in knowledge as an aesthetic and political practice.

Contents

Abstract.....	iv
1. Introduction: Valuable Experiments.....	1
2. Experimental Beginnings: Addiction and the Self Experiment in William S. Burroughs's <i>Junky</i> and <i>Queer</i>	11
3. Invisible Experiments: George Jackson, Ralph Ellison, Albert Einstein and the Matter of Thought.....	67
4. Minor Empiricism: The Revolutionary Time of Carson McCullers, Margaret Mead, and the Combahee River Collective.....	155
5. Works Cited.....	262
6. Biography.....	268

1. Introduction: Valuable Experiments

*"I can't help but dream of a kind of criticism that [...] would multiply, not judgments, but signs of existence; it would summon them, drag them from their sleep. Perhaps it would invent them—all the better. All the better. [...] It would not be sovereign or dressed in red. It would bear the lightning of possible storms."*¹

It is my hope that in its best moments this dissertation can be read as something of a love song to those valuable experiments in literature, science, and politics that traversed the experience of life in mid-twentieth-century United States culture, affirming them as a set of practices involved in "freeing life wherever it is imprisoned, or tempting it into uncertain combat" (Deleuze and Guattari, *Philosophy* 171). This hope has been inspired by Gilles Deleuze's and Felix Guattari's beautiful love song to art, science, and philosophy: *What Is Philosophy?* In it, they write, "What defines thought in [these] three great forms [...] is always confronting chaos, laying out a plane, throwing a plane over chaos" (197). Their text invents "art," "science" and "philosophy" as concepts that make sense of the ongoing chaos of the material world that precedes them and which they compose in the service of life. In my own way, I trace specific emergences of literature, science, and politics as material practices of thought that have composed, decomposed, and recomposed the prior chaos that undergirded and traversed the social and material organizations of life in the 1930s through the 1970s in the US.

¹ Foucault "The Masked Philosopher," 323.

Although I have been inspired by their work, my dissertation moves along a different current. Deleuze and Guattari's text, as a work of philosophy, departs from a historicist enterprise that might, for example, trace the proliferation of the uses and meanings of "science" or "art" in historical contexts. Instead, they give art, science, and philosophy very precise and singular functions in relation to field of absolute singularities, of chaos "defined not so much by its disorder as by the infinite speed with which every form taking shape in it vanishes" (118). But their project is not so much anti-historicist as it is, rather, simply different than historicism: indeed, they assert that the concepts they develop only attain consequence in contact with the historical, "in contact with an experience or a lived" (128). For thought to be "correctly raised at the level of practice," Deleuze writes, it "cannot be dissociated from the imperatives of experimentation and struggle" (Deleuze, *Empiricism* 16).

Although a concern with philosophy can be found in this dissertation, I focus primarily on "art" and "science," and attempt to understand the ways in which their particular functions have been "raised at the level of practice," which is to say, how they have produced an alternatively composed politics in contact with the specific "imperatives of experimentation and struggle" that accompanied intensified and mutating forms of social control in the middle decades of the twentieth century. I bring Deleuze's and Guattari's project into contact with the historicism they sidestep, but which resonates immanently in their references to American Literature as the literature of escape and their interest in anti-prison struggles in

the US.² These struggles not only informed their concepts, but also enabled them to produce new ways of seeing, understanding, and affirming the immanent success of these struggles. I have sought to find where minor art as literature and minor science have come into contact with a dominant and institutionalized history that goes under their names and stills their generative capacities by mobilizing them in the service of a false determinism. My project, then, has been one of understanding the role of literature and science as experimentation in actually existing struggles for freedom—minor politics—that do not see social prescription as their aim.

To that end, I have taken the question of imprisonment—of “freeing life wherever it is imprisoned”—quite literally. Between the 1930s and the 1970s, science and its rhetoric were mobilized for managing and normalizing the US population through new methods of microtaxonomization (often enabled through technoscience) and diagnostic-prescriptive imperatives. Corrective institutions, in particular, became increasingly dependent on the diagnostic practices of psychological, criminological, and sociological sciences for knowledge of the subjects they housed. As a result, they brought the previously separate functions of the prison and the mental hospital together in new combined facilities. Additionally, the juridical system itself turned towards scientific authority as the primary means for establishing “evidence,” and scientific knowledge gained through empirical testing came to double as legal policy. The new institutions became sites in which inmates were test subjects for methods of treatment and correction, and non-

² See: Gilles Deleuze and Claire Parnet, *Dialogues* (New York, NY: Columbia Univ. Press, 2002); and Felix Guattari, *Chaosology: Texts and Interviews, 1972-77* (Cambridge, MA: The MIT Press, 2008).

normative communities were increasingly the statistical and predictive data of empirical investigation. Experimentation, then, in this context appeared not as a struggle for freedom; it instead acted in the service of what Thomas Kuhn has called “normal science.” Normal science names the institutionalized and highly methodized practices of science, which operate under the guise of “objectivity” and “disinterest,” while becoming increasingly corporatized and militarized. This normal science, as Sandra Harding describes it, produces knowledge “to benefit only those who also have the capital to distribute the results for profit or organize and maintain social control” (Harding 71). Experimentation in this sense serves as a practice of normation and normalization, operating so the suppress race, sex, and gender difference through a regulatory violence.

Although literary and scientific experiments are rarely understood in conversation with one another, I argue that a number of midcentury writers and scientists developed alternative forms of experimentation that produced a shared project of both critiquing rapidly changing policies and practices intended to correct deviant bodies and behaviors through scientific authority, and also offering alternative understandings of and practices for organizing social life—alternatives grounded in their own experience of the effects of these institutional changes. To this end, their experiments can be understood as engaging in both the “critical” or diagnostic and “clinical” or reparative functions that Deleuze ascribes to literature and to medical science. But here, for literature and for science, the patient would not be an individual pathologized subject, but the social order and its subjugating practices.

In the course of three chapters I analyze the formal and conceptual innovations of the writers William Burroughs, Ralph Ellison, and Carson McCullers, who were intimately affected by these changing institutional conditions. In doing so, I develop a concept of “experimental literature” that is distinct from avant-garde literature and brings them into conversation with the innovative experiments of scientists Albert Hofmann, Albert Einstein, and Margaret Mead. I argue that these experimental writers denature literary genres that depend on coherent subjects, transparent reality, and developmental progress, just as these scientists disrupted similar assumptions that underpin positivist science. Both groups produce what scientist Ludwik Fleck describes as “valuable experiments.” Valuable experiments expose the difficulty of translating sense perception into knowledge, and thus cast doubt on the epistemological assumptions of their fields. They therefore require new mechanisms for asking questions, and unique, undetermined experimental techniques.

Far from understanding these experiments as parallel developments in separate fields, however, I put them in parataxis in order to highlight the ways in which science is aesthetically organized and literature serves an epistemological function. Taken together, they expose the ways in which normal science is not disinterested, objective, or transparent, but instead has depended on aesthetic determinations and hierarchies that have detrimental political effects meted out along lines of race, sex, and gender. By using this paratactic practice of inquiry, which I call minor empiricism, I argue that these valuable experiments are part of a shared project that affirms the immanent success of the disruption of positivist and

deterministic values, which can offer new insights into understanding on-the-ground politics that were also waging war against the stilling and control of life. In particular, I use these experiments to understand the writing and/as practices of queer and black radical politics, found immanently in Burroughs's experience as well as in those of the prisoner and black radical George Jackson and the black feminist group, the Combahee River Collective. All three engage in the same critical/clinical practice of valuable experimentation, the full implications of which can only become apparent by emphasizing the aesthetic and epistemological aspects of their work, made visible in contact and continuity with the valuable experiments of literature and science.

To this end, I have drawn my own reading practice from what Deleuze describes as "intensive reading," or "reading with love." Although I have sought to understand the experiments I investigate through the analytic lenses provided by science studies and the history of medicine as well as critical race studies, feminism, and Marxism, I have primarily focused on reading as a kind of labor that can "relate a book directly to what's Outside," requiring immanently developed methods for the specific configuration of relations (Deleuze, *Negotiations* 9). The writing of each chapter, then, has been a matter of reading literary, science, and political experiments as responding to and combatting the specific forms of oppression experienced by the writers, scientists, and activists who conduct them. By tracking the excesses that produce relations among the books, writers, experiments, scientists, and political struggles, I suggest that we might connect up to and extend their experiments by producing new and vital relations to them in our own moment.

In the first chapter, “How Does an Experiment Begin?” I explore William Burroughs’s first two novels, *Junky* (1953) and *Queer* (written 1951-3, published 1985). I argue that these early novels’ strange approaches to autobiographical form— *Junky* is a pseudonymous self-ethnography, and *Queer* is written in the third-person—offer insight into Burroughs’s experimental project of writing the queer self. This self-creation project enabled him to reject the underlying assumptions about identity that had made him a medical and national subject. In 1949, Burroughs underwent experimental treatment for heroin addiction at the Lexington Federal Narcotics Hospital and Prison where, far from being cured, he instead came to understand the state and economic interests involved in what was to become the national War on Drugs. I read Burroughs’s account of “junk” (heroin) sociality and circulation alongside Albert Hofmann’s early experiments synthesizing lysergic acid diethylamide (LSD) and his accidental ingestion of the chemical in order to show that for both the disorganization of subjectivity and self-perception occasioned by drug use started an experimental investigation that could only proceed through a self-experiment. Drawing on the work of scientist Ludwik Fleck and sociologist of science Hans-Jörg Rheinberger, I demonstrate that experimental self-descriptions, including Burroughs’s technique of the routine, were crucial to both his and Hofmann’s capacity to disrupt the subject-object distinction usually required of the most methodical experimental procedures. They were thus able to produce new conceptions of life, including, ultimately, a new understanding of DNA not organized around code and new forms of queer social organization built around a productively

unstable conception of “the self” that is inseparable from inchoate sensorial experience.

The second chapter, “Can You Sense an Invisible Experiment?,” moves from autobiography to “realism.” In it, I argue that Albert Einstein’s thought experiments with realism in the quantum universe, against those of the now-prevalent statistically- based Copenhagen Interpretation, develop a black radical approach to ontology that helps to make visible a similar approach found submerged in Ralph Ellison’s *Invisible Man* (1952), both of which are actualized and transformed in the letters of black radical prisoner George Jackson, published in *Soledad Brother* (1970). Reading these three thinkers as “entangled” in the quantum physics sense—that is, affecting each other beyond the limits of causality—allows me to extrapolate from their shared concerns new modes of reading and new understandings of political intervention that are necessary for a black radical freedom project that could undermine the institutional conflation of blackness, madness, and criminality at mid-century. I show how all three thinkers developed forms of “realism” that did not assume the “real” was transparently available for representation. Instead, by making use of tight spaces—for Einstein, the light-blitz box; for Ellison, his narrator’s underground “hole;” and for Jackson, his prison cell— these thinkers produced thought experiments that moved the question of knowledge from the reliability of the subject-observer to the reality of unseen objects. Insisting on such reality required them to invent methods for expanding the realm of sense perception beyond the given processes of sight, hearing, smell, taste, and feel. In doing so, they were able to imagine a political and epistemological standpoint of

invisible, impossible objects. Their non-normative realisms therefore offer new perspectives from which to critique the psychocarceral system, which criminalized black radical perception as a form of insanity. While science, aesthetics, and politics are often considered separate fields of inquiry, investigating these three thinkers as “entangled” helps to articulate the political and aesthetic implications of investigations into the quantum in the twentieth-century and the major epistemological and aesthetic interventions, as well as the immanent success, of black radical politics.

In the third chapter, “When Can You Experience Empiricism?” I explore how science came to exercise its authority through claims to both unity and disinterest, and how a surprising group of women writers, including Carson McCullers, Margaret Mead, and the Combahee River Collective, tactically reconfigured and mobilized a range of literary conventions in order to expose science itself as multiple and tactical. I argue that minority with regards to identity—whether understood in terms of age, race, or gender—had come to be aligned with the “irrational,” and a newly unified science, conceived “disinterested” and “objective,” had come to be understood as the hallmark of rationality and a means of *bildung*, bringing youth into proper citizen-subjectivity. This new conception of science gave it authority to prescribe social and political policy that often reinforced white, patriarchal rule. One remarkable aspect of the Combahee River Collective’s Statement (1977)—in which this group of black lesbian feminists articulate their intersectional politics and revolutionary goals—is their choice to ground their radical practice in a *study group*. In doing so, they contribute to a history of black

radical intervention that recognizes the failures of the US educational system, which perpetuates normative, patriarchal values and separates personal life from both political life and empirical knowledge. I argue that earlier challenges to the standardization of adolescent thought, be found in the anti-bildungsroman novels of Carson McCullers, which refuse to culminate in the coming-into- majority of their adolescent narrators [*The Heart Is a Lonely Hunter* (1940), *The Member of the Wedding* (1946), and *Clock without Hands* (1961)], and in anthropologist Margaret Mead's ethnographic rejection of universalizing theories of childhood development [*Coming of Age in Samoa* (1929)], contribute to Combahee's project while also expanding the field in which their work can be seen to intervene. These writers disrupt the authority of positivist science by developing a radical empiricism that understands experience as an undetermined, minor experiment that can affirm the radical potential of becoming, in Deleuze's terms, "forever minor." By emphasizing the centrality of minority in terms of age to an intersectional understanding of oppression in the US, their work makes an important contribution to the analyses race, class, gender, and sexuality that Combahee later articulates. Moreover, by anticipating the political value of the particularity of experience, their work joins Combahee's in creating a minor scientific practice that makes an intervention against the continued validation of normal scientific knowledge as the guiding force of humanistic political and social determinations.

2. Experimental Beginnings: Addiction and the Self Experiment in William S. Burroughs's *Junky* and *Queer*

*"His basic assumptions were untenable, and his initial experiments irreproducible, yet both were of enormous heuristic value. This is the case with all really valuable experiments. They are all of them uncertain, incomplete, and unique. And when experiments become certain, precise, and reproducible at any time, they no longer are necessary for research purposes proper but function only for demonstrations or ad hoc determinations."*¹

*"[O]nce one steps outside what's been thought before, once one ventures outside what's familiar and reassuring, once one has to invent new concepts for unknown lands, then methods and moral systems break down and thinking becomes [...] a 'perilous act,' a violence **whose first victim is oneself**. [...] People will readily agree that intense physical pursuits are dangerous, but thought too is an intense and wayward pursuit. Once you start thinking, you're bound to enter a line of thought where life and death, reason and madness, are at stake, and the line draws you on. You can think only on this magical line...."*²

William Lee is statistically unfit for treatment. Or such is the assessment of Narco's doctors. When opiate addled Lee, protagonist of William S. Burroughs's first three novels, enters the Lexington Federal Narcotics Hospital and Prison about halfway through the text of *Junky*, he is placed not on the upper level with the "Do-Rights"—those for whom "permanent cure" seems a likely prospect—but below with the men destined for "population"—those for whom "cure" is not anticipated and the only treatment is two days of methadone reduction and a seven day stay in junk-free lock-up before being shuffled to the main prison or out to work (*Junky* 51,

¹ Fleck, 85.

² Deleuze and Parnet, 103 (emphasis mine).

56). In Burroughs's text, the population appears as a litany of statements whose speakers are unnamed, detailing makeshift procedures for eliciting psychochemicals from everyday items:

...for cooking the carbolic acid out of the phenol, sweet oil and tincture of opium script.

'I tell the croaker I've got an aged mother and she uses that prescription for piles. After you get the sweet oil drained off, you put the stuff in a tablespoon and hold it over a gas flame. That burns the phenol right out. It'll hold you twenty-four hours.'

...his girl smuggled stuff into him in an orange. 'So there we were in County, Goddamn both of us shitting in our pants like a goose. Hell, when I bit into that orange it was so bitter. Must have been fifteen or twenty grains in it, shot in with a hypo. I didn't know she had that much sense.'

... 'Sweet oil and tincture. The oil floats to the top and you draw it off with a dropper. Cooks up black as tar.'

...We used to make a pipe out of a bottle and a rubber tube. We got through smoking we'd break the bottle.'

'Cook it up and shoot it.' (52)

Here, Burroughs's text mobilizes a set of concerns that guide the inquiry of this chapter. Narco's management of prisoner-patients along lines of statistically determined probabilities produces them as abstract *figures* of a population. This method of organizing treatment introduces the statistical logic that governs a certain strain of biological and medical science—especially those sciences invested in knowledge of populations, pathology, treatment, and discipline (among them: criminology and psychology) and also in prediction and control (epidemiology, genetics, and pharmacology for example). Simultaneously, this scene also begins to

reveal the possibility of an underground science, albeit one (here) still caught up in the particularly revelatory economy of heroin circulation: the junk economy. But it is a science nonetheless that could, in fact, exceed that economy. This creative misuse of the hospital-prison indicates a potential for the emergence of an experiment that will begin to turn the very materials and methods of the particular practices of capitalism and control associated with addiction and addiction treatment into ways *out* of a seemingly total system. Against the usual implications of scientific statistical thinking, corrective treatment, and mass imprisonment—which presume knowledge only in numbers (of figures), percentages, and probabilities—Burroughs’s narrator produces the individual subjects of population as unstable and singular, as proliferating and multiple selves whose thoughts and experiments with drug production repurpose the penal and laboratory spaces of “Narco” (as it was known) for a “kick” (a high, in this instance on the government’s watch and dime) instead of The Kick (getting off of junk, “the cure”). This marks the beginnings of what will become for Burroughs a conceptual and material tool for rejecting social treatment and producing social alternatives. Like other American writers in this period, writing in or about these institutions, he produces literary and social experiments that both emerge from and counter the very scientific-diagnostic grounds that put him in treatment. These furtive experimental beginnings enable Burroughs to reject The Subject, as a state form and medical research object that depends on relations to norms (normalization) and institutional legitimation, for The Self. And, ultimately, we will see that from the junk economy and its regulative sites, including Narco, a different kind of experimental

practice will emerge and extend: an experimental practice in which scientific and politico-aesthetic *resistance* and *production* are deeply imbricated in unexpected ways.

Narco's specific historical function as a state-run site of both the imprisonment *of* addicts and medical experiments *on* them reveals the confluence of disciplinary and control strategies at play in mid-century US governance: an attempt to totalize control by linking and unifying seemingly disparate sciences (psychology and criminology) and goals (treatment and punishment). Narco's existence as both a hospital and prison, from its celebrated opening in 1935 to the final closing of its Addiction Research Center (ARC) under a cloud of ethics violations accusations in 1976, is a testament to what the authors of *The Narcotic Farm: The Rise and Fall of America's First Prison for Drug Addicts*—one of the few texts available dedicated exclusively to this important site—describe as “the nation's ambivalence about how to deal with drug addiction” (Campbell, Olsen, and Walden 12). *The Narcotic Farm* ends by championing Narco's negotiation of this ambivalence and its “accomplishments that remain milestones in addiction science and treatment,” amongst which they include “developing the first quantitative scales for measuring degrees of addiction, severity of withdrawal, and the addictiveness of other drugs” and the now-prevalent “idea that addiction is a chronic, relapsing disease” (166, 23). The pathologization of behaviors and states of being and their conversion into data points as described by these authors, however, are not uncomplicatedly positive or merely neutral medical practices, nor is the assumption that “the nation” needed to “deal with” (which is to say, treat and control) “drug addiction” a transparent or

neutral truth. Both of these assumptions should be understood as under-girded by an awareness of the powerful dual promise and danger that drugs—as a potential commodity for corporate economic capture and an unpredictable, disruptive social force—have posed in the history of the nation. Indeed, despite official national anti-drug policy, the economic force of drugs and their potential for political strategies was in no way lost on the United States government. In addition to researching drugs as potential weapons, the CIA also formed alliances with drug cartels in Italy, and later Asia and South America, throughout this period in order to further other political projects, including the fight against communism.³

At Narco, this duality played out in a single site as the hospital-prison became a dealer in more than one sense: while on the one hand it confined, managed, and treated prisoner-addicts, on the other it redistributed drugs, including not only opiates for studies of the re-addiction process but also large numbers of synthetic pharmaceuticals for drug safety tests and, importantly, LSD for CIA-funded investigations into psychochemical “mind control” possibilities (Campbell, Olsen, and Walden 165). Prisoners could opt out of other forms of punishment by enrolling in these experiments, most of which were conducted under the auspices of gaining knowledge for future treatment and prevention possibilities, but which in reality frequently served corporate pharmacological and military-industrial ends.⁴ Narco,

³ See: Alfred W. McCoy, *The Politics of Heroin: CIA Complicity in the Global Drug Trade* (New York: Lawrence Hill Books, 2003).

⁴ *The Narcotic Farm* is a tremendous compilation of documents, photographs, and historical descriptions of the Lexington Federal Narcotics Hospital, but its minimal treatment of the ethical implications of the coercive conditions of prison experimentation, its mostly unproblematized acceptance of “knowledge” about and

as this double site of dealing, offers a privileged vantage point for observing the role of capital and the state's attempts to harness it in the mutually reinforcing state strategies of "treatment" and "punishment" at mid-century in the US. It also, for that very reason, can help reveal a number of often hidden scientific, socio-political, and aesthetic alternatives that occurred in the fissures between these ideologies and practices.

Burroughs, who went to Narco for "The Kick" in 1949, recognized the multiplication and consolidation of control strategies in this period, and produced what philosopher Gilles Deleuze would later conceptualize as a "line of escape," an experimental line that begins in *Junky* and continues into *Queer* and *Naked Lunch*.⁵ This chapter is interested in tracking the ways in which Burroughs locates these fissures and begins to experiment in the first two of those three linked novels. This chapter looks to Burroughs's early novels in order to ask, *how does an experiment begin?* Against traditional notions of the well-defined and methodical experiment, sociologies of science coupled with Burroughs's novels will help reveal that this question can only be answered in particularities and singularities: *how have specific*

contemporary treatment procedures for addiction, and its tacit endorsement of corporate pharmacological practices with regards to Narco's experiments make it in some ways yet another troubling entry into the national narrative of addiction history and treatment.

⁵ Deleuze's concept, *ligne de fuite*, is usually translated as "line of flight." However, as Brian Massumi notes, such a translation is misleading, as "flying" is not implied by the original French. Michelle Koerner further argues that the concept is drawn from American prisoner and black radical George Jackson and is linked to "running" and "fugitivity," not flight, which makes "escape" a more useful translation. See: Brian Massumi, "Notes on Translation," in Gilles Deleuze and Felix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis: Univ. of Minnesota Press, 1987); and Michelle Koerner, "Line of Escape: Deleuze's Encounter with George Jackson," *Genre* 44:2 (Summer 2011).

experiments begun, and what were the particular material grounds from which each emerged? By tracking these origins, I hope to link up these experimental practices and escapes to contemporary conditions—including not only the continued and draconian War on Drugs and low rates of addiction recovery, but also battles surrounding identity politics and political representation—in order to begin producing possibilities for continuing experimental lines and ways out.⁶

Burroughs's literary, aesthetic, and political experiments, initiated in *Junky* and *Queer*, and then extended and altered to engage new conditions in *Naked Lunch*, can be understood in conjunction with (that is to say, emerging from) the specific forms of increased state control around narcotics throughout his lifetime. Twice in *Junky*, Burroughs remarks on the expanding reach of the Harrison Narcotics Act of 1914, which regulated the distribution of opium (giving sole control of it to doctors) and made it taxable. The Act was subsequently tightened in 1924 to make importation of opiates illegal, and expanded again in 1937 to include marijuana under its auspices.⁷ By the time Burroughs died in 1997, the United States had long

⁶ As of 2007, over half of prisoners in federal prisons were being held on drug-related charges. (See: William J. Sabol, Ph.D., and Heather C. West, *Bureau of Justice Statistics, Prisoners in 2007* (Washington, DC: US Department of Justice, December 2008): 22, NCJ224280, Appendix Table 12.) The federal Substance Abuse and Mental Health Services' treatment report (TEDS) for 2005 puts national treatment completion rates for all programs around 35%. The same agency's 2002 Drug and Alcohol Services Information System Report (DASIS) puts recidivist admissions (2 or more admissions) at 56%. See: <http://oas.samhsa.gov/2k9/outptTX/outptTX.htm> (TEDS) (accessed July 16, 2011) and <http://oas.samhsa.gov/2k4/manyTX/manyTX.htm> (DASIS) (accessed July 16, 2011) Even taken together, these statistics give the barest outline of the low success rates for heroin addition treatment.

⁷ It is this later expansion that Lee first mentions in *Junky*; he goes on to note that peyote was not yet controlled by the narcotics act in the late 1940s (*J* 15, 122). In

been in an increasing state of “carceral crisis,” an expansion of the prison-industrial complex fueled by the national War on Drugs that continues to this day. Between the two, drug use became increasingly stigmatized, and laws were passed that made it illegal not only to buy and sell drugs, but also to *be an addict*. William Lee mentions one such law passed in Louisiana, which he counter-diagnoses as part of a “national hysteria.” Upon returning from a brief stay in Mexico, he notes that in his absence:

Louisiana passed a law making it a crime to be a drug addict. Since no particular time or place is specified, and the term “addict” is not clearly defined, no proof is necessary or even relevant under a law so formulated. No proof, and consequently no trial. This is police state legislation penalizing a state of being. Other states were emulating Louisiana. (Burroughs, *Junky* 119)

This mid-century change in legal strategy for policing narcotics was consonant with a larger change in national strategy for maintaining social control.

Legal scholar Bernard Harcourt points out that while the total number of incarcerated people is currently at a national high, the per capita number of confined persons in the US actually reached its peak in 1955 when over 600 out of every 100,000 people were institutionalized in either a prison or a mental health facility (Harcourt 1751). By the 1960s, most mental asylums were shut down, and as psychiatrist Jonathan Metzl notes, “prisons emerged where hospitals once stood” (Metzl xxi). By 2010, according to the International Association for Correctional and Forensic Psychology, prisons had become definitively the largest mental health institutions in the country (IACFP 749). Across the middle decades of the century,

1970, the state also took control of peyote with the passing of The Controlled Substances Act. See: David S. Musto, *The American Disease: Origins of Narcotic Control* (London: Oxford Univ. Press, 2003).

the hospital and prison converged, and paradoxically, alongside increasing standardization of diagnosis and advances in forensic techniques, behaviors and states of being came to be not only pathologized but also criminalized, and the distinction between “punishment” and “treatment” became increasingly obscure. Subsequently, more and more people were diagnosed and/or convicted and then confined, and the majority of these people were especially far from the imagined norm of the ideal subject-citizen (that is to say, they were poor, non-white, female, and/or queer). This strategy enabled state management and control of the material resources—primarily in the form of their *own bodies*—of those who otherwise had the fewest resources to circulate. Put another way, the new methods of institutionalization gave the state another resource for ensuring that those who already had resources maintained them, and those who did not *became* resources (not in terms of labor, but in terms of bodies) for capitalist enterprises, especially, but not limited to, the pharmaceutical industry. Given this increase in captive, useable bodies—justified by the statistical logic and scientific impulse guiding these institutions—the site of the laboratory expanded, turning the prison and asylum into massive Petri dishes for experimentation. Simultaneously, these institutions and their experimental practices rendered the people on whom the experiments were conducted politically and legally invisible.

Value Theory: Normal Science and Experimental Economies

The use of criminology and psychiatry, even at their emergence, as disciplinary mechanisms of the state is well documented, as is the long history of the primary role of financial backing in enabling and guiding scientific research.⁸ In the US, in the early half of the 20th century, the Rockefeller Foundation in effect privatized much biological, medical, and social science research, and also brought these disciplines together for problem solving and ostensibly humanitarian (and often moralizing) causes.⁹ Simultaneously, the military began major funding of the sciences after WWI, and quickly became the single largest patron of University science.¹⁰ Since then, private corporations and the military have continued to mine the social and hard sciences and have determined the problems that much institutional science would address for almost a century. This meant that in the early part of the 20th century, as the social sciences refined and expanded the reach of their technologies of “populations” and “norms,” and the United States drastically altered its funding structures for the sciences, a particular kind of scientific practice became increasingly prevalent. Science in any broad sense, then, is not the villain of

⁸ See, for example: John Tagg, *The Burden of Representation: Essays on Photographies and Histories* (Minneapolis: Univ. of Minnesota Press, 1993) on early psychology and criminology; and Larry R. Stewart, *The Rise of Public Science: Rhetoric, Technology, and Natural Philosophy in Newtonian Britain, 1660-1750* (New York: Cambridge Univ. Press, 1992) on the relationship between the industrial utility of scientific research and social support.

⁹ See: Ron Chernow, *Titan: The Life of John D. Rockefeller, Sr.*, (New York, NY: Vintage Books, 2004); and Mark Dowie, *American Foundations: An Investigative History* (Cambridge, MA: MIT Press, 2001).

¹⁰ See: Roger Geiger, "Science, Universities, and National Defense, 1945-1970," *Osiris* 2:7 (1992): 26-48.

this study. Instead, following Sandra Harding, I argue that a particular form of science—one that Harding, following Thomas Kuhn, has called “normal science”—became increasingly dependent on large-scale capital, governmental resources, and in particular, the military. That dependence subjected institutional science and its related professions (including the medical sciences) primarily to capitalist rather than experimental concerns. As Harding notes, this ensures that “knowledge [is] produced to benefit only those who also have the capital to distribute the results for profit or organize and maintain social control” (Harding 71).

While Harding draws the concept of “normal science” from Kuhn, it is important to note that her compelling analysis of the roles of capitalism and gender in “normal science” is not particularly committed to Kuhn’s notions of “revolutionary science” or “paradigm shifts.” I too take up the term “normal science” without endorsing Kuhn’s narrativization of scientific revolutions as a neutral description of scientific practice. While his text usefully deconstructs the linear historical narrative usually put forth about the history of science and helps to relativize scientific knowledge, it is not particularly interested in the ways in which capitalism itself operates by a set of dialectical procedures, conceived as progress, that require his text ultimately to affirm “revolutionary science’s” recapture by institutional science as it operates in the service of the continuation of normal science. In fact, such a progress narrative helps to hide the ways in which the drive towards scientific advancement and technoscientific progress both enables and justifies new strategies of social control.

Normal science, in fact, has become the tool par excellence of what Gilles Deleuze, following Burroughs, has called our contemporary control society: a society defined by constant circulation, connection, and flexible management techniques, which appear as greater autonomy but in fact merely shift the practices of social control to an increasingly corporatized neoliberal regime.¹¹ Consequently, the hierarchies and pedagogies of larger scientific dissemination have rendered invisible much *experimental science*—which resists corporate capture—just as they helped render invisible not only the people on whom normal science had the most direct effects, but also the *political and aesthetic experiments* those people wielded as tools against their institutional subjugation. In both instances—that of *experimental science* and *political and aesthetic experimentation*—these appositional experiments can be understood as what scientist and early sociologist of science, Ludwig Fleck, in the opening quotation to this chapter, has called the “valuable experiment.” Valuable experiments are those experiments in which knowledge is emergent and unstable. On the one hand, that emergent quality relegates these experiments and their strange, half-formed perceptive and descriptive practices to the realm of the invisible within dominant history. On the other, it is precisely the

¹¹ In both “Control and Becoming” (an interview with Antonio Negri) and “Postscript on Control Societies,” Deleuze describes the term “control societies” as originating with Burroughs and consonant with Foucault’s analyses of contemporary transformations away from disciplinary societies. The movement from discipline to control can be understood as the move from isolation and confinement to constant communication and capital flows, from production to “metaproduction,” from the sovereign signature to the floating code. While disciplinary and control strategies may operate at the same time, strategies of the control society are disguised autonomy or self-management (for example, ankle bracelets for remote monitoring that allow prisoners to live at home), but in fact merely expand the reach of social control (Deleuze, *Negotiations* 169-182).

emergent quality that renders the perceptions and practices of valuable experiments temporarily unavailable for control or capture by capitalist exchange, and hence, constitutes them as a space of radical and disruptive possibility. These first “uncertain, incomplete, and unique” attempts to isolate and describe unexpected phenomena emerge in and temporarily disrupt the research of “normal science” and the organization of civil society.

The concept of the “valuable experiment,” helps articulate a similarity between a strain of disruptive scientific experiments and disruptive experimental *writing*, of which Burroughs offers an example. Indeed, Burroughs’s first two novels participate in what might be called “the beginning” of a valuable experiment. Drawing on Fleck’s theoretical apparatus, as well as the work of another sociologist of science, Hans-Jörg Rheinberger, and the specific insights cultural critic Richard Doyle offers about Albert Hofmann’s LSD experiments, I argue that the similarities among the specific scientific and aesthetico-political experiments detailed here are more than metaphorical; they are shared processes with related material implications. For both science and literature, each of these experiments is inextricable from the experimenter’s *experience*; in none of these is the self external or inconsequential to the experiment. Rather, valuable experiments are, in fact, also always forms of *self-experimentation*, enabling personal and collective epistemological shifts that alter material practices and material conditions: self-experiments are linked as unpredictable, disruptive, and productive operations.

This tight linking of the material, biological, thinking self with the epistemological and material production of the experiment suggests that that the

valuable experiment is an experiment *with values*; it (at least temporarily) disrupts and reconfigures the scientific, aesthetic, and social values of the financial interests guiding institutional science and their linked control strategies. The experiment, then, has its own economy: an experimental economy. Thus, science and literature are not merely subject to economic laws; their valuable experiments expand the field of the material and of value in ways that alter both what *counts as economic* and also *actual lived economic conditions*.

Any particular “economy,” defined most simply as the management of finite resources, is governed by a set of conceptual presuppositions that are constitutive of and co-extensive with its material practices. The presuppositions and practices of capitalism most important for this chapter are the divisibility and reification of processes (for example, “labor” made divisible into countable labor-time), equivalence by the production of likeness (labor and money, bodies and other bodies), and exchangeability (in the form of financial/commodity exchange and political representation). Practices within the capitalist economy play out according to these suppositions, yet any particular sub-economy—for example, that of pharmaceutical medicine or the illegal drug trade—varies the forms in which these suppositions are expressed, according to that economy’s needs. Much work has gone into thinking about the ways in which supplementary economies (for example, “the affective economy”) emerge to account for and supplement the elisions of larger capitalist value systems.¹² These provocative analyses of the supplementary

¹² See, for example, Sara Ahmed, “Affective Economies,” *Social Text* 79 22:2 (2004): 117-139.

economies often reveal the flexibility of capitalism and the ways in which it can come to manage even seemingly non-economic forces. The experiments detailed in this chapter, by contrast, are *emergent* experiments and therefore do not—cannot—take capitalist presuppositions as true (which is to say, as they’re emerging, they cannot be commoditized, reified, or made divisible). They are, in their emergence, not yet available to or of use for the business interests that might eventually capture them. These experimental procedures and their co-extensive economies would not, to use the metaphor of the avant-garde, proceed by a plan of attack or dialectical critique enabled by an “outside” or a vision of “totality.” They are, instead, emergent in their own processes of production, of being written. For literature this means, to draw from Burroughs, responding to the “intolerable”—a situation in which material conditions and practices are no longer suitable for life—not with mere critique or reform, but with a recognition that one has been “maneuvered into a lifelong struggle, in which [one has] no choice except to write [a] way out” (Burroughs, *Queer* 135).

Experimental Materialism: Reading the Self

As Burroughs writes his way out, from *Junky* to *Queer*, the state-sponsored but “illegal” capitalism of the mid-century junk economy makes way for the emergence of an experimental, *queer* economy. To think how literature experiments with materiality and epistemology as valuable science experiments do, in ways that value experimental writing *as* embodied production, Burroughs’s novels require a

materialist reading practice different from historical materialism and irreducible to hermeneutics. Here, I take a cue from both Helene Cixous and Deleuze in their engagements with literature. Cixous describes her most famous literary concept, *écriture féminine*, as a writing and reading *practice* that emphasizes the material labor and use of writing and reading, rather than explication and interpretation, as fundamental to alternative (non-capitalist, non-masculinist) economic formations.¹³ Similarly, Deleuze suggests that his engagement with literature “is not a question of commenting on a text by a method of deconstruction, or by a method of textual practice, or by any other method; it is a question of seeing what *use* it has in an extra-textual practice that prolongs the text” (Deleuze, “Nietzsche” 86). Following their lead, my engagement with Burroughs is not primarily one of trying to discover what his texts *mean*, so much as seeing what they *make* and *make possible*. How did Burroughs draw from the specific and intolerable conditions he experienced in order to transform those conditions and make way for new experiences? Eventually, then, we will be able to ask not only how do experiments begin, but also how can they be used, prolonged, or extended? Thus, I am tracking Burroughs’s experimental beginnings not so much to produce a completed narrative arc of his experimental practice, but instead, to imagine ways of extending his experimentation.

¹³ Cixous’s call for *écriture féminine* has primarily appeared in the US literary study as a call for *representation* of female-authored texts and female characters in the literary canon. However, her essays—especially those that appeared in the first English translations of her work—make it clear that *écriture féminine* has little to do with texts as objects or with *women writers per se*. *Écriture féminine* is better understood as a *literary practice* that rejects and poses an alternative to masculine practices of meaning making. See: Helene Cixous, “Sorties,” “Castration or Decapitation,” and “The Laugh of Medusa” in *New French Feminisms: An Anthology*. Eds. Elaine Marks and Isabelle Courtivron (New York: Schocken Books, 1981).

Through Burroughs's two early novels, we can access the first of those questions and begin to wrestle with the second. These are frequently considered the least experimental (which is to say, most conventional) of his works when compared to *Naked Lunch*, the cut-up trilogy, or the *Red Night* novels. Moreover, why not investigate *Naked Lunch*, which has a much more clearly antagonistic relationship to medical treatment practices in the character of Dr. Benway? Indeed, Benway's appearance as a seminal character in *Naked Lunch* might be said to mark a moment at which Burroughs *overtly* takes the medical establishment as the hostile and controlling enemy it has been, for him, all along. In part, I don't begin with those because by the time we get to *Naked Lunch*, the *Nova Trilogy*, and subsequent novels, Burroughs has already produced and reconfigured an experimental system that makes it difficult to track its origins (that is, the recognizable, "normal" material conditions from which the novels emerge); in these later novels, Burroughs is on to a new set of experiments that build from and extend the earlier experimental procedures.¹⁴ The larger reason for tracking experimental procedures in the early works, however, is precisely because they are assumed (by both readers and

¹⁴ For example, *Naked Lunch*, which uses some of the same techniques as *Queer*, actually begins a new experiment with "the cut," which Burroughs then continues into *The Nova Trilogy*. *Naked Lunch* is a novel that can be, as Burroughs writes in "The Atrophied Preface" (the final section of the book), "cut into [...] at any intersection point" (*Naked Lunch* 187). It experiments with questions of totality and organization in ways that depend on the work Burroughs did in the early novels, but which are not yet available as questions in them. William S. Burroughs, *Naked Lunch: The Restored Text*. Eds. James Grauerholz and Barry Miller (New York: Grove Press, 2001). See also: Michelle Koerner, "From Controlled Substances to Control Societies," in *The Uses of Literature: Gilles Deleuze's American Rhizome*. Dissertation, Duke University. (Durham, NC: ProQuest, 2010).

Burroughs himself) to be autobiographical, and autobiography bears in special ways on the production and perception of experiments.

Burroughs overtly acknowledges the autobiographical nature of each book in its introduction. Yet the ways in which each might be considered “autobiographical” are not nearly as transparent as such acknowledgment might suggest. Both *Junky* and *Queer* were written during a period from 1951-53, and Burroughs thought of them as part of the same project (*Junky* xi). *Junky* was originally published under the pseudonym “William Lee,” and was marketed as *Lee’s* autobiography. *Queer*, which remained unpublished until 1985, was published under Burroughs’s own name, but written in the third-person. *Junky* tells of Burroughs-cum-William Lee’s experiences in the underground of the junk economy in New York City and later Mexico in the late 1940s. *Queer* is the narrative of his time in Mexico while waiting out US drug charges, his experience of withdrawal and sexual reawakening, and his search for a South American hallucinogenic plant known as yage. Biographically, there is a major break between the two novels, which is never mentioned in the body of either novel, but which Burroughs acknowledges in the 1985 introduction to *Queer*: the accidental shooting death of his wife Joan Vollmer at his own hands, after which he kicks his heroin addiction for some time. Burroughs describes the psychological difference between the two novels, saying:

In my first novel, *Junky*, the protagonist, “Lee,” comes across as integrated and self-contained, sure of himself and where he is going. In *Queer* he is disintegrated, desperately in need of contact, completely unsure of himself and his purpose.

The difference of course is simple: Lee on junk is covered, protected, and also severely limited. [...] When the cover is removed, everything

that has been held in check by junk spills out. (*Queer* 127)

The “I” of *Junky*, the “he” of *Queer*, and the other person that is the Burroughs-I of the introductions are loosely contiguous but also starkly different from one another: differences largely revealed in their relationships to junk. While junk use and junk sociality can produce non-normative perceptive practices, the above quote reveals Burroughs’s understanding of junk *addiction* (being “on junk”) as a means of controlling and containing the self.¹⁵ Burroughs understands a junk *habit* as an aesthetic limit or control (delimiting both perception and affect) on the self that can no longer organize and guide him when he writes *Queer*. The difference between the two novels manifests formally in a shift from the first-person narration of *Junky* to third-person narration in *Queer*. Accounting for that difference, Burroughs states, “While it was I who wrote *Junky*, I feel that I was being written in *Queer*” (128).

As Doyle shows (and Fleck and Rheinberger corroborate), the autobiography offers special insight into the procedures of experimentation, their reconfiguration of *the self*, and the effects such reconfiguration has on material practices. In particular, these accounts of scientific experiments and Burroughs’s early novels reveal the processes by which the usual distinctions between subject and object are disrupted at both epistemological and ontological levels, a disruption that has deep implications for both the value of “objectivity” in scientific analyses, and the

¹⁵ It would be a mistake to assume that *Junky* unequivocally glamorizes heroin use. In fact, it is quite the opposite: *Junky* describes the great social difficulties of junk addiction. Burroughs spends the remainder of his life in search of The Final Kick and of alternative methods for social organization and perception, whose possibilities he first glimpsed while on junk.

(de)valuation of “subjects” in politics. The brief episode I quoted from *Junky* in the opening pages of this chapter starts a process—in the very moment of seemingly absolute state control, of the loss of possible expressions of inmate subjectivity—from which a new kind of underground perceptivity and set of practices emerge. All these experiments, then, invoke a kind of science and experimentation not implicated in the production of taxonomic objects of knowledge or immediate corroboration of facts; instead, the experiment is reconceived as a process of inquiry-production, raising further questions and further experimental practices.¹⁶ *Junky* and *Queer*—along with Doyle’s revelations about Hofmann’s experiments—experiment with the subject *as object*, producing a set of practices of the self no longer determined politically, aesthetically, or ontologically by the subject/object distinction, nor the related demands of political and epistemological subjecthood and objectivity. This is to say, these novels offer a pedagogy for understanding the ways the autobiographical novel for Burroughs is not a document of the existing self, but a mode of producing (non-subject/anti-subject) selves: a process that operates in the same way as valuable scientific *self-experimentation*.

That Burroughs conceives of the difference between the two novels as a switch from self as observer and documenter of the junk world in *Junky* (it tells “the straight story” of junk) to self as experimental object being written in *Queer*—a

¹⁶ It is perhaps important to note that the concept of the *valuable experiment* emerges from the biological sciences—that is, science concerned specifically with life and its conditions. To this end, it can be understood as related to *vitalist experiments*, which Rob Mitchell describes in *Experimental Life: Vitalism in Romantic Science and Literature* as “mechanisms for enabling new questions and concepts” (11).

difference that hinges on his relationship to junk and has major economic repercussions for Burroughs—evinces the particular potentials and dangers of psychochemicals I outlined earlier. These potentials and dangers have not only personal, but also scientific effects. Burroughs's experiments, which begin while addicted, demonstrate the capacity of psychochemicals to instigate experiments.¹⁷ But in Lee's passage from removed observer to experimental object, Burroughs's novels also reveal the perceptual limits of experimental practices that depend on a separation of subject and object. This limit is also evidenced by Albert Hofmann's experiments with LSD. In "LSDNA: Consciousness Expansion and the Emergence of Biotechnology," Richard Doyle details Hofmann's early experiences in the late 1930s and early '40s. He first synthesized Lysergic Acid Diethylamide (LSD-25) for lab rat experiments with ergot, a neurotropic fungus thought to have pharmaceutical potentials. This was followed by his accidental ingestion of the chemical, and his subsequent experiments on himself. Doyle offers a reading of Hofmann's shifting understating of himself that demonstrates how Hofmann's self experiments disrupt the usual distinctions between object and observer required of scientific

¹⁷ I am not in any way claiming that drugs *necessarily* lead to valuable experiments (in fact, most instances of people's 'experimenting with drugs' are a far cry from what I am describing here), but psychochemicals' disorganizing of perceptive practices in Burroughs's and Hofmann's specific situations *do* help instigate one. For Burroughs, the different *feel* of the junk world--a *feel* that can be attributed to *both* the sensorial experience of being on heroin, and the non-normative social situation of junkies—helps to make an experiment possible. *The habit* of junk, however, normalizes these perceptions, and perhaps more importantly, makes desire impotent. This is why it is during *withdrawal* in *Queer* that the experiment instigated in *Junky* takes shape.

experiments, a disruption that, despite the usual illegitimacy of self-experiments, ultimately leads to a major shift in the biological sciences and genetics research.

Hofmann enters a line of experimental questioning that makes it impossible to separate the subject-cogito from its embodied, and largely disorganized, sensorial and perceptive experiences of the object being studied; knowledge is inseparable from “irreducible participation”: embodied and aesthetic experience (Doyle 111). While synthesizing LSD, Hofmann is “interrupted in [his] work by unusual sensations.” Remarkably, Doyle notes, “this interruption of the I, rather than ending an experiment, begins one” (109). In order to answer the question of whether or not he has accidentally absorbed LSD (and if so, if it has caused these weird sensations he cannot yet identify), he “has recourse to an extraordinary non-sequitur”: he will conduct a self-experiment (110). His *experience* demands a different kind of experiment; he encounters an experimental system that *can only proceed* if the self is taken as assay. For Hofmann, then, the regulations of objective subject observer are revealed as, in this instance, a less than productive limit, a delimitation, of the aesthetic and embodied experiences of a biological being studying biological phenomena. And so he must invent a new set of practices for such an experiment: even the form of the self-experiment is immanent and experimental! Entering into the unknown—of potency, of effects, of procedure—is to here open oneself to danger, and so Hofmann must embark “with caution.” Without a precedent, he must constantly ask himself “*How to go on?*” (110). Rather than documenting visible or visualized effects, as he might have with the rats (documenting countable and defined behaviors and movements), he must find new ways of accounting for half-

perceptions and half-expressions: the desire to laugh, the struggle to speak intelligibly. Lacking models or marked gradients, he cannot know what counts as significant variation, and so he resorts to—is overtaken by—a kind of graphomania. He becomes a “recording device,” producing extensive personal journals from which Doyle extracts and synthesizes his account of the changing conceptions and material experience of the self in the self-experiment (112).

This notion of becoming a recording device of the self—a self unknown to the self as it undergoes a dangerous experimental process—will find resonances with William Lee in *Queer*. The danger for either Hofmann or Burroughs—should his experiment proceed—is a radical danger that threatens not only his own life (*a* life), but also the very understanding of life that has heretofore governed him. For both Burroughs and Hoffman, their understandings of life are informed by an increasingly prevalent conception of its life processes as activated by transference of “information” among bodily structures.¹⁸ The self-experiment enables a radical thought that indicates the possibility for a complete and total breakdown of the systems of organization that control and discipline the relationship between thought and life; it opens up the possibility of new forms of organization for *life itself* not limited to communication and control. It is perhaps for this reason that Doyle describes Hofmann’s experiment as “science at its best,” by which he means a moment when “as inquiry, its direction cannot be predicted.”

¹⁸ For more on the history of information and communication as biological concepts, see: Lily Kay, *Who Wrote the Book of Life: A History of the Genetic Code* (Stanford, CA: Stanford Univ. Press, 2000).

What Doyle affirms in Hofmann's experiment is the revelation of an organism's non-identity; it is a reminder that despite statistical predictions and probabilities, "any specifically biological differences cannot be known in advance" (104). It suggests the unknowable and therefore unpredictable potentialities of life *and of science*, which, Doyle writes, "[imply] not relativism, but an extraordinary capacity for surprise..." (105). The influence and insights of Hofmann's experience-experiments would, in the 1980s, result in dramatic changes in conceptions and investigations of DNA. Genetic information would cease to be thought of as knowable information: a stable, semantic phenomenon or "secret" to be unlocked. Instead, it would become a "spectacularly mutable technology of replication and differentiation." The "undoing of identity" in Hofmann's experiments disrupts, at least temporarily, the communication and control epistemology of genetics, reframing its inquiries in terms of difference and distribution, not codes and programs (106-7).

Experimental Systems, Technical Objects: How Experiments Happen

Doyle's reading of Hofmann and the long-term impact of his work helps reveal the potentials of aesthetic—which is to say embodied, sensorial—experience for new forms of scientific knowledge-production.¹⁹ And it makes it possible to read

¹⁹ Despite a common conception of aesthetics as the study of "beauty"—a conception largely indebted to a Romantic era focus on aesthetic judgment and taste with regards to art—the long history of aesthetics, and its re-entry into scientific inquiry, has focused more generally on the relationship between perception and

Burroughs's aesthetic experiments as experiments with biological and social *life*. Burroughs's reconfiguration of his subject-self and by consequence *life itself*—a reconfiguration that becomes possible in *Junky* in contact with heroin, and materializes in his subsequent withdrawal in *Queer*—is enabled by the disruptive sensations of junk and junk-withdrawal that produce his attunement to the unpredictability of life. They enable *an extraordinary capacity for surprise* that will liberate William Lee from being the subject of state control and the capitalist cycles of the heroin trade in *Junky* and allow him to discover and produce his selves in *Queer*. What Burroughs and Doyle together offer us is a way into thinking the relationship among attunement, aesthetics, and experimentation. For both, the experiment registers not in easily cognitivized or organized visual cues, but much more expansively in what Fred Moten calls “the socialization of the ensemble of the senses” (Moten, *Break* 229). Their experimental experiences of the social and of the self as a social being are first *felt* in synaesthetic, proprioceptive, and embodied ways (in ways that, in fact, disrupt the distinctions between the senses). If “strange sensations” open Hofmann to the forms of aesthetic embodiment that underlie biology, in Burroughs's work, junk sociality as a “feeling” indicates an aesthetics of social existence with which and from which he begins to experiment.

And for Burroughs, as for Hofmann, new procedures will have to be invented, and they will have to be invented in the process of production of the experiment.

affective experience. Deleuze and Felix Guattari, in *What is Philosophy*, connect aesthetics to art without directly relating it to judgments of taste, suggesting that art itself is not based in objects, but in the “extraction of percepts and affects.” Deleuze and Guattari, *Philosophy* 24).

This is to say that the procedures will be invented *inside* and in some cases coextensive with, immanent to, the experiment, rather than external or prior to it. This demands new perceptive tools for us, then, in order to attune ourselves to such experiments. Fleck and Rheinberger offer such tools. In traditional accounts, the very concept of a self-experiment would be understood as exceptional or scientifically illegitimate; for Fleck and Rheinberger, this is not the case. Fleck's and Rheinberger's empirical accounts of the proceedings of the beginnings of actual laboratory experiments demonstrate that the general *conception* of scientific experimental methods is itself exceptional; it runs counter to experimental scientific *practice*. Experiments simply do not proceed as we think they do.²⁰ In *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*, Rheinberger usefully details the common understanding of scientific experiments, saying:

According to a long-standing tradition in the philosophy of science, experiments have been seen as singular, well-defined empirical instances embedded in the elaboration of a theory and performed in order to corroborate or to refute certain hypotheses. In the classical formulation of Karl Popper, 'the theoretician puts certain definite questions to the experimenter, and the latter, by his experiments, tries to elicit a decisive answer to these questions and to no others. All other questions he tries hard to exclude.' (28)

Here, Rheinberger refers to Karl Popper, an early philosopher of science, whose 1934 book, *The Logic of Scientific Discovery*, helped to establish a theoretical framework for understanding the proceedings of scientific experiments—a

²⁰ In large part this is not merely an effect of larger historical narrativization, but rather, is built into the practice of science writing, which makes invisible much experimental practice. See: Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts* (Princeton, NJ: Princeton Univ. Press, 1986).

framework that still to this day governs popular perceptions of science experiments, and might be understood to be a reasonable explanation for the operations of “normal science” experimentation.

By contrast, Fleck, a Polish scientist and biologist in his own right, writing around the same time as Popper, drew from accounts of August Paul Von Wasserman’s syphilis antibody studies and his own work studying bacteriological variability in order to make a sociological analysis of the ways in which scientist move from initial and vague perceptions of unexpected phenomena to honed and repeatable test procedures that could then be said to be consistent with collectively agreed upon “scientific facts.” Fleck’s empirical accounting produced a much more constructivist and relativist model than did Popper’s. Moreover, his description affirmed the contingency of events, the epistemological framework, and the psychological receptivity (“mood”) of the experimenter as important factors in the production of the experiment (Fleck 89). Rheinberger’s much later work (published in 1997, but tracking experiments conducted around mid-twentieth-century) was influenced by Fleck’s approach, which helped Rheinberger refine and produce new conceptual apparatuses for understanding continued experimental procedures.²¹

²¹ Rheinberger’s work largely bypasses Kuhn’s seminal 1962 work, *The Structure of Scientific Revolutions*, relying instead more heavily on Fleck’s analyses. Fleck’s work shares a number of similarities with Kuhn’s work (and, in fact, Kuhn was familiar with Fleck’s writings). But Fleck’s monograph was not translated into English until 1979, and therefore did not have the larger impact in the American academy that Kuhn’s work did. While both offer more relativistic models that disrupt ideas of scientific “objectivity,” one major (and oft-noticed) distinction between their works is that Fleck does not extend his analyses to produce an overarching (and dialectical) conceptual model to explain the *longue durée* of scientific progress, as Kuhn does with the ideas of “revolutionary science” and “the paradigm shift.” To my

Drawing on researchers' personal journals at mid-century, which reveal the frequently haphazard and poorly defined proceedings of many important experiments, Rheinberger argues that scientists do not begin by choosing a "theoretical framework" as Popper suggested, but by choosing an "experimental system" (25). By "experimental system," Rheinberger means first the arbitrarily isolated segment of the world that the scientist is investigating. This later expands to include the proliferation of linked experiments that develop from the initial experimentation and expand or contract the segment of the world being studied. He writes:

[Experimental systems] are systems of manipulation designed to give unknown answers to questions that the experimenters themselves are not yet able to clearly ask. Such set-ups are, as [biologist Francois] Jacobs once put it, "machines for making the future." They are not simply experimental devices that generate answers: experimental systems are vehicles for materializing questions. They inextricably cogenerate the phenomena or material entities and the concepts they come to embody. Practices and concepts thus "come packaged together." (28)

For Rheinberger, then, experiments are not theory-first fact-finding operations, but are instead subjectively organized investigative practices that generate concepts, questions, and further practices from specific, local, and contingent grounds. The

mind, this is to Fleck's credit, as it allows him to avoid a too-totalizing model of scientific practice – an avoidance that aids Rheinberger's re-entry into Fleck's work. Rheinberger suggests that the histories he is recounting "cannot easily be reconstructed in terms of paradigmatic conceptual shifts, which makes [them] resistant to a historiography oriented toward theoretical breakthroughs" (35). This observation also holds true for Fleck. For more on the differences between Fleck and Kuhn, see: Babette E. Babich, "From Fleck's *Denkstil* to Kuhn's Paradigm: Conceptual Schemes and Incommensurability," *International Studies in the Philosophy of Science* 17:1 (2003): 75-92.

conceptual and inquiry-producing possibilities enabled by a specific experimental system cannot be known in advance, nor can they be methodically (in the sense of a repeatable, objective method) derived. The material concepts they produce, however, can be grouped at a higher level of generality under the descriptive category of “epistemic objects.” For Rheinberger, epistemic objects aren’t “objects” per se, but are, rather, “irreducibly vague” structures, reactions, functions, or processes that the experimenter perceives. In the early stages, epistemic objects cannot be named or known, except by repeating a “list of their constitutive actions” until they cohere. Once the epistemic object attains a certain kind of coherence, it can then be thought – along with instruments, inscription devices, and model organisms – as a “technical object”; it becomes a method or tool that can be mobilized in the investigation of further epistemic things (29).

What becomes apparent from both Fleck’s and Rheinberger’s work is the degree to which any specific experimental results depend on the material, social, and psychological conditions from which they emerge. No clear and pre-ordained method for emergent experimental procedures can be deduced; such procedures are entirely dependent on immediate concerns and questions that arise from a given and contingent set of phenomena. Rather than providing methodological guidance for producing experiments, what Fleck and Rheinberger actually provide is a minimal conceptual framework for perceiving and understanding an experimental procedure after it has occurred. Here, what Fleck and Rheinberger offer are some conceptual tools that can be used retrospectively—given our late recognition that Burroughs has indeed embarked on an experimental series in his early novels—to

help us identify and understand the specific material and epistemological conditions to which Burroughs responds. In a larger sense, reading experiments in this way—as a set of operations that cross disciplines; involve original, disruptive perceptions generated by specific conditions; and produce questions about and responses to those conditions—will help us both identify and affirm experiments when and where they occur. In this chapter, this reading practice helps us trace and affirm Burroughs’s specific experiments, and offers us potentials for perceptive and experimental practices that we can link up to the experiments he has begun.

The Junk System

To locate the experimental system that *Junky* and *Queer* first isolate in some ways requires that in our retrospective analysis of the experiment we read the texts not only as autobiographies of Burroughs’s selves, but also put them back into the larger context from which they are extracted: a context that includes their publication and reception histories, and the many striking differences between them. This will help us trace the ways in which *Junky* and *Queer* identify and engage their own specific conditions, and work together not progressively or dialectically, but constructively: experimenting with epistemic objects and mobilizing them as technical objects in order to produce trajectories out, lines of escape.

Junky found a home with pulp publisher Ace almost immediately after Burroughs wrote it. *Queer*, by contrast, could not find a publisher, and remained unpublished until 1985. Despite being published during the AIDS crisis and just

prior to the advent of queer theory, *Queer* has been largely ignored by literary and cultural studies, including queer studies (until very recently). *Junky* has not suffered such a fate, and has, for the almost 60 years since its publication, stood as one of the definitive texts on addiction. A number of explanations have been posited for the differences between their successes. Oliver Harris, who has edited editions of both books and has published numerous essays on Burroughs, suggests that social morality of the Cold War era and Burroughs's own discomfort (one might say, closetedness) about his sexuality made *Queer* unpublishable, while *Junky*, which appeared more sociological in nature, could by-pass both public and self-censors.²²

While taking seriously the very real difficulties of homosexual life in the '40s and '50s, I also want to suggest that, in addition to the problems posed by national values and censorship, another factor contributing to the books' differing success is the relationship between the aesthetic manifestations of those values and their felicity with capitalism and business practices of the publishing industry. The "straight," sociological reportage style of *Junky* made it generically recognizable and able to fit into existing marketing strategies. Additionally, Burroughs's letters written around the time of *Junky*'s publication reveal that he was not only guided by desires for fame and money, but also that he understood the rules of the market, whether as a part of the underground junk economy or the legal publishing one. In a letter to Allen Ginsberg, Burroughs asks (regarding his publisher at Ace):

²² See: Oliver Harris, "Can You See a Virus? The Queer Cold War of William Burroughs," *Journal of American Studies* 33:2 (1999): 243-66.

Is he or is he not going to publish JUNK? Two books already out on the subject—DOWN ALL YOUR STREETS and H IS FOR HEROIN. I think this beginning of deluge. *NOW* is time to publish or we bring up rear and lose advantage of timeliness... Subject is hot now, but it won't be hot long. (*Junky* xix)

It is not merely, however, that junk and junk narratives were hot commodities. *Junky* could also be made morally palatable by packaging its scintillating narrative inside the same cover with *The Agent*, a junk narrative told from a cop's point of view. The two-for-one book became a miniature of the dialectical procedures by which mid-century capitalism both produced and regulated illegal markets. Their illegality was, of course, always validated and funded by legitimate markets: Burroughs reveals that agents put real government money into junk circulation in their crack-downs on addicts. Simultaneously, addicts were enlisted as stoolies, and agents became addicts for the purposes of infiltrating the junk economy (Burroughs calls them "addict agents"), completing the hermeneutic circle of legitimate and junk economies (140). Not only is the junk (heroin) economy a *junk economy*—a parodic *and* real illegal economy that reveals the *junk* (bad) nature of legitimate capitalism—but so is the publishing industry, which mobilizes the repressive hypothesis, purporting to condemn the use of junk, while offering it up for consumption. *Queer*, by contrast, produces queer content and a queer aesthetic irreducible to binaristic "homosexuality" that might be set against normative "heterosexuality" in a similar kind of reinscription process.²³ Moreover, its generic

²³ In fact, despite his longstanding notoriety as an openly queer member of the counter-culture movement, Burroughs has proven exceptionally difficult for gay and lesbian movements to utilize. Always preferring the term "queer" to "gay," and

unrecognizability—its formal queerness—made it virtually unmarketable. Even with its publication in 1985, it remained queer in ways that prevented even queer theory from bringing it under its investigative auspices.²⁴ *Junky* was simply more readily available for capture by multiple markets than was *Queer*.

Junky, however, is not reducible to one half of the dialectics of legality, nor is it merely a cog in the addiction fact-producing machine. This emphasis on economic conditions allows us to see that when, in *Junky*, William Lee isolates the system of junk as his experimental system, it is a bracketed, extra-legal portion of the larger capitalist economy at work in the US and trans-nationally. The junk system is full of epistemic objects, including junk itself, junkies, pushers, the in-between spaces of the junk trade, and the processes of circulation of junk both financially and biologically. However, Lee is not the first junky, and other junkies have experimented and produced technical objects—tools—he can use. Among them, of course, are the repurposed, newly revisioned medical and household objects that Lee lists in the passage that opened this chapter: bottles, tubes, droppers, even oranges. But more importantly, the junky epistemology has developed conceptual

highly resistant to collective ideologies and identity politics, he has been quoted as saying, “I’m not gay, and I’m sure as hell not part of any movement.” See: *William S. Burroughs: A Man Within*, dir. Yony Leyser (BulletProof Film, 2010): DVD.

²⁴ Timothy Murphy comments that one reason for the absence of *Queer* from queer theory is that it is in fact, *not* the closeted narrative (that then “comes out” with its publication in the 80s) that Harris describes it to be. Murphy notes, “In his writing, at least, Burroughs has always already been ‘out’ and spends little time narrating how he got there. [...] The dialectic of ‘in’ and ‘out’ is of little use to Burroughs the novelist, as is the narrative norm based on it.” Timothy Murphy, *Wising Up the Marks: The Amodern William Burroughs* (Berkeley: Univ. of California Press, 1997): 60. Burroughs’s queer epistemology is not the epistemology of the closet that informed much early queer theory. See also: Eve Kosofsky Sedgwick, *Epistemology of the Closet* (Berkeley: Univ. of California Press, 1990).

tools—technical objects—that help him map and negotiate the junk world, and eventually allow him to begin to catalogue and repeat the constitutive features of what will become for these novels his most important epistemic-cum-technical object: The Routine.

Most critics suggest that the form of *The Routine* begins in *Queer* but finds its fullest expression in *Naked Lunch*.²⁵ But in fact, *The Routine* emerges as a vague object in *Junky*: Lee the junky sociologist of junk repeatedly describes routines as they occur. The people who populate *Junky* are presented as “characters” or “personalities”—descriptions that suggest the constituted nature of their identities, linking them to the act of “being written” by Burroughs the author (43, 55, 63, etc.). But this is no Nabokovian internalization and self-reflexivity of the narrative. Instead, it might be understood as an externalization of literary practice to actual lives. *Junky* does not merely document or represent lives; it repeats them in invented characters who operate as a repetition of real-world junk practices—it externalizes junk experience. (Though, writing in the first-person, Burroughs is not quite yet able to externalize and depersonalize his own experience.) The junk experience is of, as we will come to see, an unstable and shifting world, where identity, too, is unstable. Routines—repetitions of one’s story—help produce junkies as apparently stable, as somewhat coherent “personalities” or “characters.” This instability of identity is not *particular* to the junk world—Judith Butler later theorize identity as performative and iterative with regards to both the self and the state, and

²⁵ Among them, Timothy Murphy and Oliver Harris. See both, “No Final Glossary: Fugitive Words in *Junky* and *Queer*,” in *Wising Up the Marks* and the introduction to *Queer*.

others have theorized the stabilization of the unstable subject via identity as a necessary strategy of capitalism more generally²⁶—but the particular *value* of this instability in the junk economy can be perceived as qualitatively different and differently useful.

This difference in value is because the junk world is qualitatively different, palpably different: an alternative world differently inhabiting the space and time of the otherwise-same city. Certainly one can register this difference at the level of the visual. Junk has visible effects: Burroughs says users *look like* junk. But that is not merely because it causes a weathered or haggard appearance, but because *junk embodies them*. It produces a way of moving in the world and a series of *stylized* gestures that link even unlike “physical types” (25). So the visible cues are secondary to a sensorial embodiment that marks the junk world. The experience of junk is less an experience of *seeing* differently than an experience of *feeling* differently.²⁷ Burroughs describes a good shot of heroin as first *felt*: it prickles (21). But one’s bodily awareness is heightened when on junk: a bad shot is first known because it *feels* different. But more than that, junk changes the *feel* of its locales within the city. Even when “the connection has gone somewhere else [...] the feel of junk is still there. It hits you at the corner, follows you along the block, then falls away like a discouraged panhandler” (25). Junk confronts you, stands in your way,

²⁶ See: Judith Butler, *The Psychic Life of Power: Theories in Subjection* (Stanford, CA: Stanford Univ. Press, 1997), and J. K. Gibson-Graham, *The End of Capitalism (As We Knew It): A Feminist Critique of Political Economy* (Minneapolis: Univ. of Minnesota Press, 2006).

²⁷ This concept of “feeling,” for Burroughs, might be understood as related to the “mood” of the researchers in Fleck’s description. For both, the “feeling” or “mood” produces the possibility of attunement to new perceptions.

alters your movements, your way of experiencing and being in the world. It destabilizes and alters space, time, and language in unpredictable ways.

In *Wising Up the Marks: The Amodern William Burroughs*, Timothy Murphy details the ways in which the liminality and instability of institutionalized *spaces* allows them to be remapped and repurposed by the junky. He describes this remapping of the city as a “fugitive cartography” that:

subsists less in the separate destinations than in the open spaces *between*, the adjacent or transitional spaces: street corners, subway stations, doctors’ waiting rooms, Skid Row bars, and short-term slum apartments—the whole itinerary of the addict. (48)

Murphy describes these spaces as the unanticipated effect of “economic modernization—the methodical effort to produce manageable urban space.” As functional spaces were created (houses, offices, mass transportation vehicles), so too were these liminal spaces: spaces for waiting or moving between. These liminal spaces become the space of the junky. Murphy further explains how this spatial instability is mirrored in the temporal instability of junk-time:

The control, or discipline, imposed by the police in order to stabilize the liminal spaces is fundamentally *temporal* control. . . The police move through liminal spaces—especially the streets, bars, and subway tunnels—according to a relatively regular rhythm, a pulse or ‘beat’ that the junky must anticipate and complement; the junky plays a syncopated rhythm, as in ragtime or jazz, against the regular beat of the police. Thus, junky social organization is necessarily discontinuous, improvisatory, and not rigidly structured or centered. (50-51)

The junky lives in the in-between time, just as he does the in-between spaces. And just as the junky makes use of the unexpected architectural excesses and temporal

gaps of control systems, he also makes use of semantic instability and excesses, a fact attested to by the “glossary” of junk terms at the end of the novel. Burroughs-Lee writes:

It should be understood that these words are subject to rapid changes, and that a word that has one hip meaning one year may have another the next. [...] Not only do the words change meanings, but meanings vary locally at the same time. A final glossary, therefore, cannot be made of words whose intentions are fugitive. (*Junky* 133)

The junky uses the instability of language to keep both himself and *his language* fugitive from the law: Henry, Charly, and Benny protect the user from being caught conversing about heroin, cocaine, or benzedrine. The right words at the right time can make all the difference between getting an easy score and getting beat; knowing the code allows you to differentiate a mark from a pigeon from the man (129-133). Constant shifts keep the junky on his toes, but they help to keep him safe, too. They are part of the world he inhabits. It is not merely that space, time, and language are unstable in the junk world, but that instability is valued as *the very condition of possibility* of the junky and junk sociality.²⁸

But as Murphy has already noted, the junky doesn’t live in the junk world alone. He limns and negotiates dominant society at the same time. Routines begins to emerge for Burroughs as one way in which the junky produces himself as

²⁸ The illegal capitalist economy of the heroin trade can value *instability* because it is not an economy dependent on property relations and property ownership. In a trade in which money is simply used to buy more using (a shot of heroin), one doesn’t need or want to enter into property contracts—one wants to avoid the accountability that comes with ownership. This is, of course, a source of great difficulty for the addict when he encounters the “legitimate” capitalism of medical pharmacology.

apparently stable for social interactions that cross those borders. Something that hints at what the routine will become first emerges as Lee and fellow addict Roy attempt to get a doctor to write them a prescription for dope. “There are several varieties of writing croaker,” Lee says; “Some will write only if they are convinced you are an addict, others only if they are convinced you’re not.” In order to convince doctors in whichever direction is necessary—a lie (such as a physical ailment) or the truth (“I need it”), it matters not—“most addicts put down a story worn smooth by years of use. [...] Roy had an operation scar on his stomach that he used to support his gallstone routine” (Burroughs, *Junky* 17). Calling it a “routine” makes it easy to assume that Roy has not really had a gallstone operation. . . but we actually don’t know. More importantly: *it makes no difference*. A routine is not a routine because it is a fabulation, but because it is repeated for use in a given situation, regardless of its truth-value.

The Routine: Form and the Anti-Subject Self

Burroughs does not define a routine, though he uses the word repeatedly when he gives descriptive, empirical accounts of various encounters between “characters.” Most routines turn out to be cons for extracting money or drugs, but they are not “cons” because the content of the routine is untrue so much as because their purposes are deceptive. The meaning or purpose that a routine offers to the receiver has no ties to any kind of material fact or coherent interior identity; it is itself a production. And routines are not the province solely of the addict, or even of

people. The state, it turns out, can throw down a routine as readily as a junky, such as when it uses the myth of junkies trying to produce child-addicts as “a propaganda routine to stir up anti-junk sentiment and pass some new laws” (Burroughs, *Junky* 120). Routines are a method of meaning and identity production aimed at extracting *value* from someone else or disciplining him; a routine as the method by which the junky or the state produces his/its identity reveals that identity is not so much a quality of individuals or a social fact so much as an effect *and* a tool.

As a tool for producing meaning and stability in a shifting world, routines are actually primarily wielded *against* the junky. While the junky sometimes turns them against the state, his desires for something *from* the state—access to junk—makes his routine of subject-production into a constant desire for an “I” the state can recognize. The “I” becomes an addictive substance that the state can dole out to the junky (when it affirms his routine as worthy of junk) or deny; the “I” as a method for fulfilling needs becomes itself a need. So as it turns out, then, junk is not the only substance to which one can be addicted, nor are substances themselves inherently addictive. *Situations* produce addictions—addictions are methods of control that operate by producing excess need. And addictions to junk and the subject (“I”) in *Junky* are coupled with an addiction to *money*.²⁹ The junky is always selling to buy, cycling through money as through junk. Their circulation is both interactive (money

²⁹ The idea of addictive situations, rather than addictive substances, goes against much anti-drug rhetoric (especially that of “gateway drugs”). Yet several of the most interesting, compassionate, and experimental treatment and management facilities for drug addiction are built precisely on the notion that *anything* can be addictive in the right circumstances. One such example is the Portland Hotel and safe injection site in Vancouver, BC. See: Gabor Mate, *In the Realm of Hungry Ghosts: Close Encounters with Addiction* (Berkeley, CA: North Atlantic Books, 2010).

buys junk), and also parallel (junk buys money). In a later interview with Daniel Odier, Burroughs clarifies the addictive nature of money that first appears in *Junky*, saying:

You see there is something wrong with the whole concept of money. It takes always more and more to buy less and less. Money is like junk. A dose that fixes you on Monday won't fix you on Friday. [...] It eats quality and shits out quantity. [...] That is why by its nature money is worth always less and less. (Odier 74)

Capitalism is a junk economy because it is also a *con*, a junk deception. It appears stable—a dollar equals four quarters equals a dollar—but money itself is worth less and less, and, in many ways (especially following dissolution of the Bretton Woods agreement) quite literally worthless.³⁰

Given these conditions, the junky in particular needs a routine as a tool for negotiating the non-junk world because when he appears *as a junky* there, he appears as a *problem* for the state and for capital. While the *junk economy* links up to dominant sites of legal capitalist exchange and helps continue the flows of capital, it has to be regulated in ways that legal capitalism does not. This is because there are nodes within the junk economy *through which capital will not flow*: junkies. The difficulty of the junky for capitalism—the reason addiction itself becomes disciplined as morally reprehensible and ultimately criminalized, in need of treatment or reform—is that the junky is the *end* of a flow of capital. As Murphy

³⁰ In 1971—the same year as Nixon's official declaration of the War on Drugs—the United States abandoned the international Bretton Woods system, thus eliminating the gold standard for currency. Money, at that point, ceased to "represent" real gold (or be exchangeable for gold at any time), and instead was backed only by a government guarantee.

notes, for Burroughs, when the junky turns the practices and tools of the dominant capitalist economy against itself, he does so not by being “a revolutionary” but “an anti-productive agent” (55). His anti-productivity is, at least in part, enabled by his need and willingness to fabricate identities *with which he does not identify*. The citizen of the state and good capitalist, even when she is aware of a certain element of performativity in her identity, *makes real* in her performance of that identity by a certain *identification* with it, a desire for it as a social position and political enabler. One of the control mechanisms of capital and the state is to *channel the flows of desire* such that they cathect onto socially “useful” and appropriate identities needed to maintain property relations; this ensures that those inhabiting those identities maintain an appropriate distance from citizen-subject norms. For Burroughs, however, this instability will lead to an escape from any sort of engagement with or desire for capital or the state—it will lead him to leave behind *the subject* all together. The very concept of subjectivity is itself a production that enables the capture of selves to control by making them cohesive and knowable; identity gives “meaningful” form to, but also imprisons, life. Burroughs’s observations about routines and their emergence as epistemic objects in *Junky* allows him to mobilize The Routine as a technical object in *Queer*. Off his addiction to junk, he will use The Routine a practice of *radical destabilization* that can be used to free up desire from the structures of control.

Encountering the Intolerable: Escape

The need to liberate himself from addiction emerged for Burroughs in his encounter with the intolerable. In *Junky*, Burroughs begins to experience the “intolerable” of junk: the junk economy, junk addiction, junk life. He describes the intolerable experience of addiction—the moment when there appears to be no outside to the junk economy, whether he is on *or* off junk—when he is taken from a city jail to another hospital (not Narco), saying:

From junk sickness there seems to be no escape. Junk sickness is the reverse side of junk kick. The kick of junk *is* that you have to have it. Junkies run on junk time and junk metabolism. They are subject to junk climate. They are warmed and chilled by junk. The kick of junk is living under junk conditions. You cannot escape from junk sickness any more than you can escape from junk kick after a shot.

I was too weak to get out of bed. I could not lie still. In junk sickness, any conceivable line of action or inaction seems intolerable. A man might die simply because he could not stand to stay in his body. (*Junky* 81)

For Burroughs, the intolerable is related not just to being on or off junk, but to the larger social situation revealed by junk – *the whole system is junk*. The intolerable is experienced as an overabundance of intensity, with no capacity to direct it. It appears as the futility of *any conceivable line of action or inaction* and a desire to escape one’s own body. When conditions become intolerable, when they are no longer suitable for aleatory life, the possibility emerges for one to “crack” reality (an

action Deleuze will later attribute to Burroughs's writing).³¹ Joan's death, which occurred between the writing of *Queer* and *Junky* was another encounter with the intolerable for Burroughs, producing a break in reality; a moment in which the mere critique or recognition of the deceptions of reality are no longer enough. Disorganized and broken reality must be reconstituted: a constitution that begins with the liberated self producing its own forms of organization.

Burroughs begins *Queer* by liberating himself from addiction to the "I." The novel continues with the same protagonist as *Junky*, but William Lee is now written in the third-person. In doing so, Burroughs-Lee also moves from sociological-scientific observer to experimental assay, no longer writing but experiencing himself as being written and read. He "depersonalizes" himself in order to tap into the "power of an impersonal," a power Deleuze suggests is the *beginning of literature*: "It is not the first two persons that function as the condition for literary enunciation; literature begins only when a third person *is born in us* that strips us of the power to say 'I'" (Deleuze, "Literature" 3, emphasis mine). If Burroughs is, as he suggests, *being written* in *Queer*, it is another Burroughs unknown to himself in advance: another person born, a person not called "I." In this move from the sociological to the literary, he enables a new kind of self-experiment. He experiments with a self he does not (cannot) know; it is a self not based on models (citizen, subject) nor interested in unifying under an identity.

³¹For Deleuze, *the intolerable* is a concept often linked to the instigation of action, and Deleuze frequently aligns it with Foucault's experiments in thought. In "Control and Becoming," however, he also links the intolerable to Burroughs. In *The Logic of Sense*, he goes on to explain how Burroughs writing "cracks" reality. Deleuze, *Logic*, 160-1.

In the 1985 introduction for *Queer*, Burroughs explains that Joan's death and his own culpability in it was an encounter that, for him, was the "first clear indication of something in my being that was not me, and not under my control" (Burroughs, *Queer* 135). From then on, it was his life's mission to "escape" from this "Ugly Spirit," from "Control." It is this realization that something else—language and social structures—have control over him that "maneuver[s him] into a lifelong struggle, in which [he] had no choice except to write [his] way out" (135). Importantly, however, *Queer* is less a diagnostic of the conditions of control than a choice *to write his way out*, to produce an escape. And this escape is not a kind of dialectical counter-control or self-control (subject-production). It is, rather, an escape from *all* forms of control, including that of the subject. In abandoning control, Burroughs produces not just a self, but *selves*.

This self-experiment, this production of selves, happens in the form of The Routine. As in *Junky*, Burroughs explicitly labels Lee's performances in *Queer* "routines," but in contrast to *Junky*, the routine no longer indicates a cumulative repetition that tends towards identity or stability. In *Queer*, Lee produces himself as a series of routines that are never repeated, and come to him externally, "like dictation. He did not know what he was going to say next [...]" (57). He becomes an oilman, a drag queen, a slave trader, and a chess master in turn, blurting out uncontrolled and uncontrollable narratives that do not precede their being said nor extend beyond it. These routines are the production of the self as non-cumulative and non-interior: they constitute a pure exteriority of production, a production that

is antagonist to the legal structures of state-based capitalism precisely in its valuation of inconsistency and unknowability.

It should be noted that Lee's routines are often productions of despicable characters (the slave trader, the oil man): selves who, despite Burroughs professed hatred of control, are the epitome of excessive power and control. On the surface, these routines can be read as expressive of his desire to colonize or control others: a not unreasonable reading, given that he has "escaped" into Mexico, where his money gets him further. But for Burroughs, Mexico is not so much a place that he wants to colonize or control, as a place where he can *escape control*. What appeals to Burroughs about Mexico is not its material resources or people that he can take advantage of, but the poverty and dirt that, for him, enable a world of amoralism (which is to say, anti-moralizing). In Mexico, the cops don't bother you, don't keep a regular beat, and:

Boys and young me walked down the street arm in arm and no one paid them any mind. It wasn't that people didn't care what others thought; it simply would not occur to a Mexican to expect criticism from a stranger, nor to criticize the behavior of others. (122)

For Burroughs, moralism is just another strategy of discipline and control. (This is not to suggest that Burroughs isn't interested in a kind of ethics or ethical sociality – a point to which I will return.) Given this investment in anti-moralism, and Burroughs's frequently unexpected value system, his racist, sexist, and controlling Routine fantasies might not be straightforward expressions of expected white male desires or appropriation of others. Instead, they might better be understood as explosive and parodic responses to the futility of the models of desire and power

that have been put on offer for him: these are the men he is encouraged to produce himself *as*; they are also undesirable and ridiculous, already parodies of themselves. For Burroughs, there is no such thing as, for example, a binding contract between equals (all contracts are between slaves and masters, enforced by violence – or they are, like the *junk* economics of capitalism, merely *junk bonds*). And there are no useable models for openly homosexual-social relations between men that limn the boundaries between friend and lover.³²

Additionally, these routines might be understood as possible selves that expose the ironic and parodic dialectic between stereotype and identity. Rather than moving away from derisive and politically incorrect stereotypes, Lee moves into them.³³ What he mocks, however, seems to be not so much the production of the

³² The attempt to embody homosocial-sexual relationships that move between intensities of friends and lovers, without falling into completely uncommitted notions of free-love or overly committed and binding contracts of coupledness, is a struggle that Burroughs will continue throughout his life. It is also a struggle that Michel Foucault will later articulate explicitly in ways that are quite similar to Burroughs's experience. See Michel Foucault, "Friendship as a Way of Life," *The Essential Works of Foucault 1954-1984, Volume One: Ethics, Subjectivity, Truth*. Ed. Paul Rabinow. Trans. Robert Hurley. (New York: The New Press, 1997): 135-140.

³³ For this reason, among others, Burroughs's work is often considered anathema to many feminists who cite his misogyny as a major flaw in his work. But his abandonment of meaning-making procedures and embodiment of writing as a production of selves brings his writing very much in-line with Cixous's concept of *écriture féminine*. Burroughs's relationship to and opinions about women vacillated throughout his lifetime, but what is most clear is that when he rejected the value of women, it was not so much *women* per se as male-female *binarism* that he took as an enemy. Like sexual difference feminists Cixous and Luce Irigaray, Burroughs attempts to abandon binaries for *difference*. In the event that binaries might be biological (and therefore inescapable), Burroughs's solution was most in-line with a feminist such as Monique Wittig, who called for separately sexed societies. Understood in this way, Burroughs is shockingly—if invertedly—in close conversation with sexual difference feminists. See the introduction to *Wising Up the*

stereotypes based on existing identities as the inverse: the production of the self as a coherent interiority in line with a prescribed identity, a stereotype. These selves he produces are also absurd and humorous—identity is disjunctive rather than producing solidarity—which breaks even further with the conditions of identity politics. That, along with his ambiguous relationship to existing models for solidarity along the lines of identity—despite sharing similar concerns about oppression and control as with many identity groups—might contribute to his general inaccessibility to Queer Studies. More importantly, his antagonism to interiority makes his work difficult to submit to a psychoanalytic reading; psychoanalysis remains a major facet of Queer Studies. Yet, despite these difficulties, he shares many ethical concerns that have emerged under the provenance of Queer Studies: most obviously, an interest in non-heteronormative social arrangements, which he produces by multiplying the self.

This break with a cohesive self and self-control extends to a break with the generic conventions of either the novel *or* autobiography. *Queer* has only the most minimal of narrative structure. As Timothy Murphy points out:

The routine is a form of micronarrative that operates by multiplication and juxtaposition, but no set of these proliferating routines can be combined to form a unified macronarrative similar to the traditional short story or novel. In *Queer*, these routines are held together by the force of the autobiographical frame which only “unifies” them negatively by grounding them in Lee, whom they traverse and exceed in all directions. (Murphy 61)

Marks for a more thorough explication of Burroughs’s conflicted life-long relationship to women.

The novel ends abruptly, truncatedly (you would never know it was the “end” if it weren’t for turning the page to find a blank one, and then an epilogue). And even the epilogue reinforces the lack of accumulation of meaning in the text. The epilogue is disjunctive from the novel that precedes it by suddenly switching to a first-person narrator. It ends with the telling of a dream in which Lee or Burroughs produces Lee again as a new Routine, one that exacerbates the non-cumulative sense of his narrative: this time, he is “the skip tracer,” the tracker of missing persons.

If Burroughs’s text can be said to resemble an existing genre, it would most likely be the largely abandoned picaresque, but the narrative disunity makes it even more radically destabilized than most books that could fall under that generic heading, and even less accessible to meaning-making. This inability to accumulate or resolve makes the novel not only difficult to “read” in any conventional or critical sense, but moreover makes it difficult to publish. Its form, rather than its content (as the book is, in reality, no more sexually or violently graphic than *Junky*) is what makes it largely, and for a long time, unavailable to the literary market. But *Queer*’s ambiguous relationship to capital extends beyond generic difficulties. While *Junky* was written with money in mind, Burroughs decides after initial rejections that he actually doesn’t want *Queer* published. When he later re-reads it for the purposes of writing the 1985 introduction, it is with a kind of trepidation. He says he doesn’t recognize the self he sees therein. If *Junky* ‘conned’ the market—not so much diagnosing junkies as expected, but instead diagnosing the society that produced them—*Queer* does something entirely different. Not only is it not conning the

publishing industry or dominant society more generally, it has abandoned any interaction with or desire for them at all.

All these indicate, then, that *Queer* was, at least for a time, best understood as part of another economy, as producing another economy. If the capitalism of *Junky* is a junk economy, then the economy of *Queer* might best be described as a queer economy: an emergent, experimental economy not based on existing forms or models. It is an economy that is non-normative not because it is not the norm, but because it is *without a conception of the norm at all*. It is an economy in which, at least temporarily, the values of abstract equivalence, reification, and exchange—as well as disciplinary technologies of statistics and norms—give way to embodied, erotic, biological processes and shared (communal) experiences. Here, rather than mapping counter-cartographies onto capitalist spaces of management and control as he had in *Junky*, Lee produces a way out, a line into unknown and invented lands. He is no longer mapping (which even in producing counter-cartographies is still invested in “knowing” and to some extent “conquering” the lands it maps, as a colonial mapping project might), but instead burrowing into space, extending it. Similarly, here, Lee produces a new relationship to time. If in *Junky*, Lee moved to a rhythm, a beat syncopated to the downbeat of the police, in *Queer*, he has no beat to respond to. He is searching for a rhythm—or rather, he is seeking to make a new rhythm: an arrhythmic rhythm. His timing is always off. But it is in this just-off timing that we can see and affirm the struggle of the experiment: what a *struggle* it is to invent new forms of sociality appropriate to new economies! And how possible, how *likely* to fail to produce forms that will sustain themselves! For this reason, it

becomes all the more important to affirm in Burroughs's text the search for ways to ask questions in the first place that might enable new forms, and to affirm the struggle for those forms *most* when they fail.

The production of the skip tracer, seeking missing people, at the end of the novel points retroactively to the second experiment of the book: the production of social forms for the anti-subject, multiple self enabled by The Routine. The novel seeks a way to find people, a people. The routines that Lee invents throughout *Queer* begin as attempts to make a connection with Eugene Allerton, his love/friend-interest. But the confluence of self-sociality (a self as multiple) and external sociality poses a special problem for Lee and Allerton—not least of all because Allerton has not yet experienced the epistemological and ontological shifts that enable him to enter the new economy. He is still operating under the assumptions of the old economy. Moreover, Lee only has on hand social models from that old economy—models that do not fit his non-interiorized, non-identified self.

Lee's routines confuse Allerton. For Lee, they *mean* nothing at all; they are acts aimed at connection. But Allerton wants to read (and read into) Lee's narratives. When Allerton first meets Lee, he senses there "was something familiar to him," a familiarity that "put Allerton on guard." For Allerton:

When Lee talked, he seemed to mean more than what he said. A special emphasis to a word or a greeting hinted at a period of familiarity in some other time and place. As though Lee were saying, "You know what I mean. *You* remember." (Burroughs, *Queer* 21)

While it is only fair to say that, at a minimal level, Lee *is* trying to communicate his queerness and desire to Allerton, it is not, for example, allegorized in some readable

way in his routines. Lee's queerness—both his strangeness and his attraction to men—appear to be part of another time and place because he exists with a different relationship to time and place. His actions, then, come across as awkward and ill-timed. When, for example, “Lee tried to achieve a greeting at once friendly and casual, designed to show interest without pushing a short acquaintance [,] the result was ghastly.” In his attempts to communicate a desire for friendship, Lee appears simultaneously lustful and painful, “mutilated and hopeless,” and “shockingly out of time and place” (15). His routines, too, require a kind of connection founded on disjuncture and humor, not on “getting to know” someone. But this communication is frequently one-way. Lee's absolute externalization of self makes him primarily expressive, rather than receptive, and it, at times, makes Allerton feel “oppressed,” and “shut off” from the rest of the world (24). The routine as a practice can liberate the self from the subject, but a new practice is required for liberating social organization from romantic love and the couple—for producing an alternative sociality of queer sexual-sociality. How, after all, can a multiple self ever conform to the model of the couple?³⁴

Lee tries, however, several techniques for social organization that he draws from the old capitalist economy and repurposes. When Lee takes Allerton with him to Central and South America in search of a powerful hallucinogenic drug called

³⁴ Again, interestingly, Burroughs is quite close to Cixous here. In recognizing the oppositional binary that the couple usually embodies, Burroughs actually takes the couple as the site from which one—in attempting to create an impossible coupling, where the binarism falls apart—can reject binarism. Cixous suggests a similar path, from the grounds of the couple, to the rejection of sexual binarism and sexual opposition in her early essay, “Castration and Decapitation.”

yage, he tries to get Allerton to enter into a contract with him: sex and companionship in exchange for Lee paying Allerton's way on the trip. This contract mimics the form of heterosexual coupledness solidified through the marriage contract, yet it is already an underground or "illegal" contract in this sense: a contract between a john and a male prostitute. When Lee tries to register a complaint to Allerton for "breach of contract" (77), this contract comes to reveal (just as aspects of the junk economy did) the coercive nature of all contracts: without a legal guarantee, the only *guarantee* would be one of violence. This is also a realization, then, that the force of law itself is always the force of violence: the social contract is a form of coercion.³⁵ Lee is not interested in exerting physical force over Allerton, and the contract falls apart.

This recognition of the failure of the couple and of the contract, however, is sometimes traversed by another possibility that is not predetermined or scripted (as relations would be by the normativity of coupledness or the strictures of the contract). We might call this, in Deleuzian terms, "becoming animal." Though there are moments in *Junky* when Lee might be said to "become animal," these moments are clearly demarcated as drunk imaginings or junk-induced hallucinations. For example, while briefly in Mexico, near the end of *Junky*, Lee closes his eyes and imagines a face with "dull crustacean eyes," that leads him "to the final place where the human road ends, where the human form can no longer contain the crustacean

³⁵ Burroughs recognition of the violence of the law and the coerciveness of the social contract anticipates the later and quite compelling arguments of legal and feminist scholars. See, for example, Robert Cover, "Violence and the Word," *Yale Law Journal* 95 (1986); and Carole Pateman, *The Sexual Contract* (Oxford: Blackwell Publishers, 1988).

horror that has grown inside" (Burroughs, *Junky* 111). But what begins as an imagined "horror" in *Junky* becomes a site of possibility in *Queer*.

In *Queer*, Lee's "becoming animal" is not marked off as an event of the cogito, the thinking-subject. It is an event of embodied thinking, and thinking embodiment. If in *Junky* Lee was both hyper-aware of his body and in complete control, in *Queer*, his body is a foreign element, alien to him. And this new and unknown relationship to his body allows him to produce new forms of bodily social encounter. Sitting next to Allerton in a movie theater, Lee says he:

could feel his body pull toward Allerton, an amoeboid protoplasmic projection, straining with a blind worm hunger to enter the other's body, to breathe with his lungs, see with his eyes, learn the feel of his viscera and genitals. (Burroughs, *Queer* 33)

Here, the self is not only multiple and external, but extensive and mutating, not only not bound by the "I" of subjectivity, but no longer bound by the skin, the borders of the body. And though this may appear to be another fantasy of colonization, this abandonment of the body is as much a desire to *receive* as to be received. How can one give and receive without colonizing the other; how can one accept the dangers as well as the pleasures and possibilities of penetration. What forms could ethical sociality take? It raises a question that will continue to preoccupy Burroughs throughout his life, as evidenced by his answer to questions in a late '80s interview:

Interviewer: "You talk about keeping yourself open...this idea of possession, is this something you don't want to happen?"

WSB: "Oh yes, well generally speaking yes, well there's a difficult question there, as you're letting yourself open to experience because that's the only way you can experience, but also there's a danger of letting yourself open to something that is very injurious."

Interviewer: “How do you know that in advance?”

WSB: “You don’t. That’s just it, you don’t. [...] That’s always been a problem of being receptive....” (Yeyser)

How does one accept the difficulties of being receptive—the danger—while maintaining that receptivity *is the form of experience*? How does one open one’s self up in the face of *no guarantees*? For Burroughs, becoming animal is one attempt to answer this question, to produce a practice of receptivity. This becoming-amoeba that Lee practices with Allerton marks the beginning of an experimental object that, by the time we reach *Naked Lunch* reaches a full expression: a complete inability to tell whether Lee is human or centipedal animal. And this transformation is less a metaphor than a material practice: just as command and control epistemologies govern the ontological possibilities of matter, Burroughs’s new epistemology enables new ontological possibilities, possibilities that emerge in his *extraordinary capacity for surprise*, for experiencing the potentials of life that could not be predicted.

But in *Queer*, too, despite the incomplete and unsuccessful nature of his fumbling experiments towards alternative sociality, there is some element of fulfillment. Just before Lee and Allerton pass through unknown and mythic lands in search of yage—that is, in search of freedom from control and the possibility of transversal communication—Lee and Allerton make one last stop in Guayaquil. Without even realizing it, without cognivizing it, Lee finds what he has been looking for all along: transversal communication and transmigration *by other than chemical*

means. Nearing sleep he enters another's body, and there feels that boy's desire for a woman. He is not so much colonizing the other—not investing the other with his own desires—as experiencing him. “‘I’m not queer,’ he thought, ‘I’m disembodied’” (Burroughs, *Queer* 86).

Through these attempts, Burroughs produces the possibility of a telepathic and transversal community of bodies that escapes not only the strictures of the contract but the form of the couple. In loosing the bounds of the subject body, Lee produces himself here not as “statistically unfit for treatment” as he was in *Junky*, but unfit for *statistics* all together. He is no longer practicing the underground science of *Junky* that used the laws and practices of capitalism against themselves merely for another capitalism (addiction). Here, he invents a new minor science of the self and the proliferation of life.

Coda: Unknown Experiments

The authors of *The Narcotic Farm* list Burroughs among the “famous” patients who were once treated at Narco—a list that includes several writers and no small number of jazz musicians. It also, however, suggests that he is “among the minority” who didn’t prefer detoxing there, and dismisses him as “preternaturally tart,” suggesting that his resistance to Narco stemmed more from his asociality than his addiction (Campbell, Olsen, and Walden 74). Yet it would be difficult for a book that ultimately celebrates Narco to affirm Burroughs’s depiction. *The Narcotic Farm* seems to imagine that the best intentions of doctors and staff could overcome the

structural problems of the prison-medical-industrial complex and their programs for treatment, punishment, and reform. Instead, Burroughs exposes that those best intentions are still bad intentions whose solutions, grounded not in social changes but disciplining of the will, can only repeat the same problems: treating addicts until they become good citizen-subjects, or keeping the aberrant locked away behind bars.

Outside of Narco's walls, however, Burroughs produced a line of escape *through literature* not only from the institution of Narco, but also from the larger structures and practices that would come to define scientific knowledge about addiction. Those same structures would continue to produce mass incarceration in this country in the name of the War on Drugs and pathologization as an attempt to discipline social difference. By tracking Burroughs's line, we can begin to think about new lines of escape: lines that will always be dangerous; lines that will begin with questions and *without guarantees*. Experiments cannot be known before we make them.

3. Invisible Experiments: George Jackson, Ralph Ellison, Albert Einstein and the Matter of Thought

"I've always strived to see the indivisible thing cutting across the artificial barricades which have been erected to an older section of our brains, back to the mind of the primitive commune that exists in all blacks."¹

"The function, the psychology, of artistic selectivity is to eliminate from art form all those elements of experience which contain no compelling significance. [...This] enables man to conquer chaos and master destiny."²

"It is the theory which decides what we can observe."³

After the 1971 shooting death of Black Panther George Jackson at the hands of a prison guard, one of the many books removed from his cell was Ralph Ellison's *Invisible Man*.⁴ In 1961, 18-year-old Jackson was convinced by his court-appointed lawyer to plead guilty to charges of robbery and was given an indeterminate sentence—"one year to life"—which would end up encompassing the entirety of his adult life (Jackson ix). During his decade in prison, seven and a half years of which were spent in solitary confinement, Jackson committed himself to a rigorous analysis of the confined conditions that delimited his experience, and ultimately evinced himself to be a serious philosopher of the prison. By the time of Jackson's

¹ Jackson, 4.

² Ralph Ellison, "Richard Wright's Blues," 94.

³ Albert Einstein, quoted in: Heisenberg, *Physics* 77.

⁴ In addition to *Invisible Man*, Jackson also had a copy of Ellison's *Shadow and Act*, as well as 97 other books by authors ranging from Eldridge Cleaver to George Orwell, from Friedrich Nietzsche to C.L.R. James. A complete list is available at kamasaproject.org/2009/08/22/books-taken-from-george-jacksons-cell (accessed July 5, 2012).

death, Ellison had fallen out of favor with the black radical left, having been widely criticized for his perceived liberalism and a commitment to aesthetic practice over and against overt political action and protest (Bradley 57). While the published writings of Jackson contain no reference to Ellison, Jackson's interest in the novel may have been prompted by black radicals' criticism of it rather than the novel's popular accolades. Indeed, Ellison's more overtly leftist politics (and especially his involvement with the communist party) waned in the years following the novel's 1952 publication, and Barbara Foley has argued that Ellison in fact put his own early radicalism under erasure both throughout the revision process of his novel and in his public self-presentation.⁵

Yet the political possibilities that erupt within Ellison's experimental novel and his writing practice are not circumscribed by the lasting public narrative nor by the pervasive critical reading of the novel's epilogue—an ending which critics have presumed ties together the novel's primarily picaresque form into a closed object, a closed hermeneutic circle—as a prescription for liberal individualism. In fact, despite Ellison's and Jackson's oppositional aims expressed in the opening epigraphs to this chapter—Ellison's to erect divisions that might allow art to take form, and Jackson's to break them down for revolutionary return—they are linked, at least in part, by their mobilization of invisibility within confined spaces (Jackson's solitary confinement “hole” and the invisible man's underground hole) for the purposes of political thought—thought which, for both, revealed itself over and over

⁵ See Barbara Foley, *Wrestling with the Left: The Making of Ralph Ellison's Invisible Man* (Durham, NC: Duke Univ. Press, 2010).

again in its most material and aesthetic dimensions. And it enabled both to question whether “proper” political thought (as ideology) would necessarily lead to emancipatory action; psychology separated from the irruptive physics of life would not be enough. Thus, such questioning led them to invent, through processes of experimentation, and specifically the *thought experiment*, new means of both understanding and engendering political action. Ultimately, despite overt differences between the two, both were especially attuned to the ways in which *division* (what Ellison called “selectivity” and Jackson called “barricades”) had been the productive force of an Enlightenment epistemology that suppressed ontological excess and made it invisible, non-existent. This attunement to and affirmation of the reality of invisible experience would allow both to describe anew time, history, and experience in ways that could invent open ontologies that could respond to the insistent materiality of the world. And such inventions would engender new capacities for responding to the specific institutionalized conditions of black people in the US. For both, a recognition of an anoriginal world prior to such division and a capacity to return “to the primitive commune” or for art to produce entirely new forms of thought by way of selection from a prior and existing world finds the two thinkers and their work *entangled*.

In “Reversion and Diversion,” the poet Édouard Glissant describes “the point of entanglement” as something that is not an origin exactly (Glissant 14). Instead, it is a node that connects and entangles the black diaspora and what Houston Baker, explicating Glissant, calls its “dispersed singularities” (Baker 1). Here, Glissant and Baker borrow from the language of quantum physics. *Entanglement* is the term

physicist Erwin Schrödinger, in 1935, used to describe a quantum phenomenon that Albert Einstein observed as “spooky action at a distance”: the apparent capacity of two distant particles to affect each other across space-time separation without physical causality. Impossibly, these particles interact faster than the speed of light, which is, according to the theory of relativity, the absolute limit speed for information transfer. Because the technical capacity to conduct an appropriate physical experiment did not exist, Einstein “observed” such action via a thought experiment.⁶ His development of the “thought experiment” as a theoretically profitable tool would prove to be one of his most important contributions to the study of atomic physics, and his observation of the paradox of entanglement fueled the majority of the thinking about the quantum world throughout the twentieth century.

Entanglement remains one of the central mysteries of quantum physics: any two objects can become entangled simply by interacting, but their continued ability to affect each other while neither in proximity to one another nor connected by some other medium such as a force field brings scientific study at its most daring dangerously close to the pre-Enlightenment magic it defined itself against. The mysterious and almost magical force of entanglement is echoed in Glissant’s concept of “reversion”; for him, the trans-Atlantic slave trade is a point of entanglement that

⁶ For a brief overview of developments in entanglement theory, see Alexandra Witze, “75 Years of Entanglement,” *ScienceNews* 178:11 (2010): 25. For more detailed and narrative histories of entanglement, see, for example, Amir D. Aczel, *Entanglement* (2003); Brian Clegg, *The God Effect: Science’s Strangest Phenomenon* (2009); Sameer Ketkar, *Entanglement* (2011); Valerio Scarani and Rachel Thew, *Quantum Physics: A First Encounter: Interference, Entanglement, and Reality* (2006).

continues to connect those who are part of the black diaspora, despite now existing across the globe without any direct, local connections to one another. Reversion to the point of entanglement augments epistemological recursion, disrupting notions of linear or progressive historical temporality and spatial division, and multiplying connections, producing infinite series, through this anoriginal node.

Glissant's use of the term "entanglement" as a way of thinking past and through epistemologically constructed divisions is not simply a metaphorical appropriation of the language of physics. Rather, the applicability of the Schrödinger-Einstein concept to dispersed black relationality invites us to consider the ways in which quantum theory itself, along with one of its most rigorous thinkers, Einstein, might be entangled in a history of blackness.⁷ More particularly, it invites us to consider how he might be entangled with Ellison and Jackson, even though their work seems not only wholly separate from his but also from each others'. While Einstein's intellectual pursuits were primarily focused on the supposedly apolitical study of quantum physics, Ellison's art is primarily concerned with the racial paradoxes of US civic life that promised democracy while denying it to a large portion of the population, and Jackson's letters are primarily concerned with the paradoxes of a prison correctional system that employed "treatment" practices that left prisoners more damaged than when they had entered.

⁷ Fred Moten argues that "blackness" is distinct from "the people (which is to say, more generally, the things) that are called black," and suggests, instead, that blackness might be understood as unruly being that "operates at the nexus of the social and the ontological, the historical and the essential." Moten, "Black Op," 1744; and "Case," 187.

The systems they confront seem worlds apart, but their struggles to describe a world that affirms the reality and agency of invisible objects and impossible connections are, in fact, *entangled* in an irruptive counter-history of blackness and black radical possibility that traverses a dominant scientific history of the Enlightenment. Engaged in their specific struggles with the quantum world, civic life, and the prison system, each would come to see division as the structuring feature of an Enlightenment epistemology that takes the world as fully systematic and knowable through a given understanding of the (divided) senses. All three were motivated in their struggles to understand the epistemological function of division itself. The selections and barricades that concerned Ellison and Jackson also name the “cut” [*Schnitt*] that Werner Heisenberg described as dividing the classical from the quantum world, a division that Einstein rejected. Einstein, Ellison, and Jackson recognized that division was a method of isolating, totalizing, and rationalizing a world, making it inaccessible to other worlds and the irruptive forces across and beyond it.

Of the three, the need to counter a positivist scientific epistemology was perhaps felt most urgently by Jackson, whose imprisonment was justified through its legacy. But Ellison recognized the need for it with great clarity as well, despite his professed desire for “selectivity.” As scientific logics had been translated into the growing fields of criminology, psychology, and sociology, they served as the basis for twentieth-century civic practices and correctional institutions that tried to enforce systemization through division. Einstein’s great contribution was to understand this need not as *external* to science—as though it were a matter of the aesthetic or

political misuse of science—but internal to it. His interventions in scientific practice and possibility—his invention of new perceptive practices and new descriptive possibilities—provided continuity with Ellison and Jackson for an epistemological revision that might traverse the whole social and material realm that art, science, and politics tries to think. Their thought experiments take shape as new forms of realism—for Einstein, quantum realism, and for Ellison, dilated realism—that invent new epistemologies for open, undetermined ontologies, black radical ontologies, constructed on the excessive and surprising relations between science, aesthetics, and radical politics. Their questioning leads them away from “explanation” and allows them to describe anew time, history, and experience in ways that can respond to the insistent and unpredictable materiality of the world. It leads them beyond epistemological determinism, closed ontologies, the limits of historical causality, ideology, and institutional structures (especially those enabled by racial science). It leads them all to a recognition of an anoriginal world prior to division and to the possibility of what Ellison described as a politics of love, to the capacity to actualize, through “the love act,” Jackson’s “primitive commune”: the ongoing connection and material and political force of those scattered across the diaspora.

Thought Experiments and the Problem of Visibility

Because I have suggested that the value of the thought experiments of Einstein, Ellison, and Jackson are for engaging *specific conditions* and *specific systems*—conditions which are not identical for any of these thinkers, and which

vary greatly in scope and magnitude—it may seem dubious to even describe the tool itself as similar, except in the most general sense. Yet, I argue, all three depart from the more vague use of “thought experiment” (*gedankenexperiment*) proposed by the term’s coiner, Ernst Mach in 1906, as any act of imagination and conjecture. Instead, they employ it in the way developed most precisely by Einstein, primarily through an imagined box that could emit a single quantum of light.⁸ A number of literary critics have sought to link the “thought experiment” of physics to both the social sciences and literature (especially science fiction) by understanding it in its more general sense: thought experiments act as “virtual laborator[ies that] serve as the perfect testing ground for hypothetical scenarios that predict possible future(s)” — whether those be the futures of particle interactions or the futures of human societies (Jakimovska and Jakimovski 55).⁹ According to this definition, thought experiments stand in for physical experiments in order to make determinations and predictions that would be otherwise technically impossible, fiscally implausible, or unethical. For Einstein, however, predicting future behaviors as determined by given experimental conditions was rarely an end unto itself. Instead, one of the major functions of the thought experiment as he developed it was to operate as a

⁸ “Quantum” designates the smallest discrete particle involved in any physical interaction. Though many features of the quantum world are not understood as “discrete particles” (i.e. the entire “quantum world” is not divisible into quanta) the name derives from the Einstein’s observation that light at high frequencies can behave as though “mutually independent energy quanta,” or “atoms of light,” which are now known as photons. See: Norbert Wiener, *Differential Space, Quantum Systems, and Prediction* (Cambridge, MA: The Massachusetts Institute of Technology Press, 1966).

⁹ See also: Edward A. Davenport, “Literature as Thought Experiment (On Aiding and Abetting the Muse),” *Philosophy of the Social Sciences* 13:3 (1983): 279-306.

check on the assumptions that undergird physical experiments, especially those that concern the supposedly transparent relationship of an object to its observer.

For Einstein, the problem of observation was a central conceit of atomic physics, which he acknowledged, saying:

Every observation [...] presupposes an unambiguous connection known to us between the phenomenon to be observed and the sensation which eventually penetrates our consciousness. But we can only be sure of this connection, if we know the natural laws by which it is determined. If, however, as is obviously the case with modern atomic physics, these laws have to be called into question, then the concept of observation loses its clear meaning. (Heisenberg, *Encounters* 114).

The thought experiment then operates as a reminder that observation is frequently determined by theoretical presumptions. Visibility is neither a precondition nor a guarantee of knowledge about the material world; greater visibility simply does not imply greater knowledge. It is along these lines that Ellison's novel and Jackson's letters, collected in *Soledad Brother*, operate as series of thought experiments similar to those found in quantum physics; they act as checks on the supposed guarantees of visibility, requiring and enabling the production of new values to supplement a limited empirical positivism. The thought experiment helps to register the possibility of sensorial experience that exceeds our understanding of what it means to sense. Experimenting with thought, then, is not merely experimenting *via* thought, but also experimenting with *how* thinking happens, with our capacity to experience *sensations* and allow them *to penetrate our consciousness*.

In the 1984 introduction to a new edition of *Invisible Man*, Ellison describes his novel as an unwilling or accidental work of "science fiction" (Ellison xv). In doing

so, he seems to invoke H.G. Wells's 1897 novella, *The Invisible Man*, upon whose title the later novel signifies. Yet Ellison's novel does not bear out the conventional traits that dominated the genre of the science fiction novel by midcentury. Set contemporaneous with Ellison's own life, *Invisible Man* at its strangest seems more a surreal depiction of his present moment than the techno-future fantasy extrapolated from scientific knowledge that was characteristic of many works of the genre Wells helped to solidify. Wells's narrator's research into optics enables him to change his own "refractive index," thereby making himself, as subject-observer then object of science, invisible (Wells 108). Ellison's narrator, by contrast, is the desired object that is invisible not because of his own physical qualities, but because of a defect in the observer: "[M]y invisibility [is not] exactly a matter of biochemical accident to my epidermis," he clarifies. "That invisibility to which I refer occurs because of a peculiar disposition in the eyes of those with whom I come into contact. A matter of the construction of their *inner* eyes, those eyes with which they look through their physical eyes upon reality" (Ellison 3). Overtly, then, Ellison sets up the question of invisibility as one not of biology, chemistry, or physics, but of the conditions for social recognition that are inhibited by racialization.

But in Ellison's moment, as today, it was virtually impossible to extricate the social and political effects of racialization and racialized experience from scientific discourses. As critic Scott Selisker notes, one of the major operations of *Invisible Man* is that of "satirizing and critiquing the political consequences of new scientific discourses that were central to a new approach to racism in the United States"

(Selisker 573). Selisker argues that such centrality can be gleaned not only from the

myriad parodies of scientific practices (most significantly, sociology) within the novel, but also and perhaps more so from the novel's penultimate scene, in which all of the invisible man's enemies are linked under the nomination "scientist" (571).

The novel proper ends—just before the epilogue—with a fantasy sequence in which the narrator, having had his eyes (and perhaps his testicles) cut out, is asked, *"How does it feel to be free of one's illusions?"* (Ellison 569, italics original). To the men who've mutilated him, he yells: *"Still [...] there's your universe, and that drip-drop upon the water you hear is all the history you've made, all you're going to make. Now laugh, you scientists. Let's hear you laugh!"* (570). The group he calls "scientists" consists of all the leaders—Brother Jack, Bledsoe, Norton, Ras, Emerson—who have tried to inculcate him into their nominally anti-racist ideologies. Their ideologies, however, are compromised by the men's overarching desires for money or power, and those desires play out not in the service of racial equality, but instead through the instrumentalization of black people for the leaders' own moral agendas, which they back via scientific rhetoric. Given this gruesome ending and the expansive cast of despicable characters labeled "scientists," it is difficult not to read the novel as a chilling indictment of science itself and the increasing purchase of scientific logic on US social and political life in the first half of the twentieth century. Indeed, Ellison's rejection of racial science anticipates the specific effects on black life it will manifest in the combining of the prison and psychiatric hospital only a few years later. Those effects will also lead George Jackson to suggest that the first step in a revolutionary practice would be "to extinguish forever the light of a perverted science" that grounds American "ideals, moralities, and institutions" (Jackson 100).

Scientific Racism and the Psychocarceral System

Both *Invisible Man* and *Soledad Brother* are extended analyses of the peculiar and mutating systems of social control that continue to impinge on black life in the US, and which operate as or interact with the legacies of the “peculiar institution” of slavery. While Ellison does not specifically investigate the site of the prison, his novel understands criminalization of black life as bound up with its pathologization. In Ellison’s novel, being diagnosed as “mad” (in the case of the “crazy,” yet critically astute and prescient black doctor at the Golden Day) or labeled a “criminal” (in the case of Rinehart) effects a political disappearance of black thought and life that criticized or produced alternatives to (white) civil society; these diagnoses also attempt to neutralizes any political efficacy that such “outsides” might enable, leaving them mere noise at best (the doctor) or opportunistic and cannibalistic at worst (Rinehart).

But it is also his dual self-diagnosis as mad and criminal that leads the narrator (who, near the novel’s end accidentally becomes a double for the criminal Rinehart and struggles with the possibility that he is no longer sane) into the hole, into years of self-imposed solitary confinement. His self-reflexive inhabitation of a mad, criminal subjectivity acts as a pivot that allows him to access a new standpoint, the standpoint of the object. For Jackson, his position as “criminal” oscillates between signifying madness to the state and threatening to produce it. Jackson knew that the state could and would levy a charge of insanity to extend his sentence and keep him confined without due process. But Jackson, too, came to find that the

state's imposition of his position as object gave him special insight into the workings of a psycho-carceral system gone mad and a sense of urgency and necessity in intervening against it.

Between the time of *Invisible Man*'s publication and Jackson's death, national carceral and psychotherapeutic control strategies underwent major revisions, revisions which tended toward increased psychological torture in the prison, largely in the form of extended solitary confinement, and toward increased bodily torture and manipulation with the rise of psychosurgery.¹⁰ Simultaneously, psychotherapeutic "treatment" came increasingly under the control of the prison as the dissolution of mental hospitals, the rise of psychiatric prisons, and changes in diagnoses—especially that of schizophrenia—led to greater use of psychiatric diagnostics for imprisoning those who rejected, protested against, or sometimes simply described their experience of the oppressive racial conditions of the US.

Jonathan Metzl's provocative study, *The Protest Psychosis* (2010), documents

¹⁰ After several decades in the late nineteenth century in which solitary confinement was prevalent as a supposedly therapeutic penal practice, the early decades of the twentieth century saw a drastic reduction in its use. In the 1950s, concurrent with the beginning of the dissolution of many psychiatric hospitals and asylums, solitary confinement was reinstituted in many prisons, though without any imagined therapeutic applications. The numbers of prisoners in some form of solitary confinement increased drastically, and most often those who had been diagnosed with mental illnesses or who were perceived to be mentally ill were the victims of isolation practices. From 1983 to the present, with the birth and expansion of the "Supermax" prison, the number of prisoners in solitary confinement has risen by 40 percent. Most human rights groups consider solitary confinement to be torture. For a more detailed account of these changes, see: Peter Scharff Smith, "Solitary Confinement: An Introduction to the Istanbul Statement on the Use and Effects of Solitary Confinement," *Torture Journal* 18:1 (2008): 56-62, and the "Solitary Watch: News from a Nation in Lockdown" website: <http://solitarywatch.files.wordpress.com/2012/01/solitary-confinement-faq-short-version.pdf> [accessed February 9, 2012].

changes to the diagnosis of schizophrenia and its effects, especially with regards to the convergence of the psychiatric hospital and the prison. He notes that in the late 1960s, some psychiatrists began to associate Black Power rhetoric with insanity, and the symptomatology of “protest psychosis” entered into the diagnostic criteria for schizophrenia (Metzl 100). This was but one way—and a particularly egregious one at that—in which diagnosis is shaped by racial politics, allowing it to be mobilized for social control. Metzl demonstrates that in the second half of the twentieth century, mental illness diagnoses were often wielded to incarcerate black men leading up to the civil rights movement and in the continued and highly visible racial turmoil that followed in its wake (xiii-xvi).

In his own moment, Jackson is aware of this imbrication of the functions of the prison and the asylum, noting that the prison had begun “operat[ing] under the heading Department of Corrections” (Jackson 25). For Jackson, simply coming under the control of the prison makes one vulnerable to being diagnosed as “mad,” and enables the mobilization of a disingenuous discourse of “therapeutics” to justify systemic prisoner abuse and its psychological effects. Based on his experience, he writes:

Penologists regard prisons as asylums. [...] But what can we say about these asylums since *none* of the inmates are ever cured? Since in every instance they are sent out of the prison more damaged physically and mentally than when they entered.” (Jackson 25).

Ironically emphasizing this point, the only form of “therapy” practiced in the prison, he says, is “club” or “oak-stick therapeutics”: being beaten (10). This double move, in which psychiatric diagnoses were used for the purposes of penal incarceration

and incarceration readily implied madness, meant that psychiatric rhetoric made invisible the *political* events that brought people into the prison and nullified any political stand they might take from inside. The systematic wielding of the state's power, especially to diagnose radical and resistant politics as forms of insanity, led to the massive production of political prisoners in this period—especially among those involved with the Black Panther Party—which neutralized real political dissent under the name “mental illness.”¹¹

This particular history of incarceration and its removal of troublesome black bodies from the civil population in the US is evidence of but one way that psychiatry was mobilized for social control. While Jackson describes how prisons used the rhetoric of mental illness, Ellison's novel offers a critical anticipation of the ways in which psychiatry would use criminality as a justification for the violent and racialized trajectory of psychosurgery that was to follow in the next several decades. In one of the most famous scenes in *Invisible Man*, the narrator, after being knocked out by an explosion at Liberty Paint Factory, comes to, groggily, in the factory hospital. He hears his grandmother's voice singing to him, punctuated by the voices of two men. As fully awakens, he begins to realize that these men are debating the best way to “treat” him for his injuries: a lobotomy? castration? or—as they finally decide—a new, experimental, non-surgical lobotomy? (Ellison 236). The non-surgical lobotomy is, in fact, electroshock therapy. This scene points to the ever-

¹¹ See: Dylan Rodriguez, *Forced Passages: Imprisoned Radical Intellectuals and the U.S. Prison Regime* (Minneapolis: Univ. of Minnesota Press, 2006) for a detailed analysis of the ways in which the US state makes invisible the fact that it holds many political prisoners.

expanding range of medical strategies used, post “emancipation,” both to experiment on black bodies for the purposes of “scientific knowledge” and improvement of largely white medicine, psychology, and psychiatry, and to discipline and control black bodies, their reproduction, and most importantly, their thought—a history that points to at least some of the limits of “emancipation” or “liberation” within a *civic* context as political end-goals.

The conversation begins with an ironic portrayal of the racist presumptions about the statistical utility of a black person for knowledge about human psychology more generally. As one doctor says:

I believe it a mistake to assume that solutions—cures, that is—apply in, uh. . . more primitive instances, are, uh. . . equally effective when more advanced conditions are in question. Suppose it were a New Englander with a Harvard background. (Ellison 236).

The doctor’s claim might seem to imply a social-constructionist view of psychology—suggesting that a “New Englander” might have a different psychological experience than that of the narrator—yet the invocation of the word “primitive” makes it clear that this is not a rejection of psychological universalism, but rather, of the narrator’s capacity to be a statistically valid “human.” His data is inapplicable not because of his differing circumstances and experiences, but because of his partial humanity.

Vital work has been done and continues to be done to document the host of scientific-medical experiments on black people in the US, many of which were performed under government control: from the laboratory of the eighteenth- and

nineteenth-century plantation to contemporary experiments on prisoners.¹² Ellison refers to such a history when his narrator fears that the experimental treatment being performed on him might be castration, a longstanding tool of racial eugenics. Ellison also puts castration alongside psychosurgical methods, suggesting that the two might be similarly used for race-based social control. Such a pairing is somewhat surprising and particularly prescient. Though Ellison would have been familiar with lobotomy and shock therapy, especially through his relationship with the psychologist Frederic Wertham, little documentation exists to suggest that in that moment black people were the primary recipients of these therapies. Given the prevalence of racialized medical experimentation in the US, the virtual absence of early psychosurgical experimentation on black people in the 1930s and '40s—at least as was considered scientifically meaningful enough to record—is worth noting: it manifests the degree to which institutional psychiatry considered black minds to “primitive” to be comparable with white minds or similarly “treated.”¹³ However, as

¹² An extensive account of the long history of race-based scientific experimentation in the US can be found in Harriet Washington's *Medical Apartheid: The Dark History of Medical Experimentation on Black Americans from Colonial Times to the Present* (New York, NY: Doubleday, 2008). See also, Britt Rusert, "'A Study in Nature': The Tuskegee Experiments and the new South Plantation," *Journal of Medical Humanities* (2009). Despite a brief tightening of regulations that slowed (or hid) much prisoner experimentation post-1978, the laws have since been relaxed again (in 2008) and coercive prison experiments are again on the rise.

¹³ Several histories of the origins of psychosurgery—including Elliott Valenstein's *Great and Desperate Cures: The Rise and Decline of Psychosurgery and other Radical Treatments for Mental Illness* (eBooks: CreateSpace, 2010) and Jack D. Pressman's *Last Resort: Psychosurgery and the Limits of Medicine* (Cambridge, UK: Cambridge Univ. Press, 1998)—bear no mention of race in their pages. Vanessa Johnson, however, points out that in the few black-run and -populated psychiatric hospitals, lobotomy and shock treatment were used for treatment at similar rates as those for

institutional psychotherapy began to take more and more black people under its auspices, the racial dynamics of testing changed. Fulfilling the prophesy of Ellison's suggestive scene, by the 1960s and '70s, black men were the primary targets of experimental psychosurgery.¹⁴

Knowledge of such a trajectory complicates the dialogue between the white doctors in this scene, which parodies the racist presumptions of psychiatric discourse in the first half of the twentieth century. The parody of the doctors operates not merely at the level of their racism, however, but also goes on to mock the misapplication of descriptive psychological theory to neurosurgery. The doctors continue:

“You see, instead of severing the prefrontal lobe, a single lobe, that is, we might apply pressure in the proper degrees to the major centers of nerve control—our concept is Gestalt—and the result is as complete a change of personality as you'll find in your famous fairy-tale cases of criminals transformed into amiable fellows after all that bloody business of brain operation. And what's more,” the voice went on triumphantly, “the patient is both physically and neurologically whole.” (236)

The doctor here conflates Gestalt, or whole-perception, psychology with a “whole” conception of the neurological brain. Gestalt psychology is less a theory of the brain and its structures than of the phenomenology of perception; it holds that the mind perceives objects in their totality, yet the component parts of such a whole are other than the total object (Humphrey 401). The doctor's misuse and misunderstanding of

white patients in white hospitals. See: Vanessa Johnson, *Separate and Unequal: The Legacy of Racially Segregated Mental Hospitals* (2005).

¹⁴ See, in particular, “Part Two: The Usual Subjects” in Washington's aforementioned book.

Gestalt principles suggests major themes of the novel—those of the disjuncture between parts and wholes and between perception and prescriptions—as well as an ad hoc or hodgepodge justification for bodily invasion. Moreover, the doctor here conflates “criminality” and “insanity.” Criminal behavior is equivalent to psychological disease. The lack of differentiation among types of criminal behaviors and psychological states belies the problem of generalizing “aberrance” as surgically treatable—especially when, as the first quotation from this scene reveals, to be black was *already* to be statistically aberrant for the purposes of psychology. To be black for American psychology in this period was to be insane (but without any psychological depth) and also to be criminal.

This paradoxical “treatment” of the untreatable black mind tended to amount to nothing less than racial criminalization, bodily punishment, and abuse, which only intensified in the years following *Invisible Man*’s publication. Ellison’s engagements with psychotherapeutic practice outside the novel—and especially his support of LaFargue Clinic, the first psychotherapeutic clinic for black people in the US—suggest that Ellison had a more complex relationship to psychiatric practice than the merely critical one offered in this scene, yet his suspicions about universalizing psychological explanations and justifications for indictments of black social experience, especially those produced along statistical lines, remained consistent.¹⁵ For Ellison, statistically-based critiques of black social organization helped to guarantee the particular paradoxes that governed black civic life; blacks

¹⁵ For a more detailed account of Ellison’s work with LaFargue Clinic, see: Shelley Eversley, “The Lunatic’s Fancy and the Work of Art.”

were promised democracy while being systematically denied it because they were constantly being designated and produced (through the use of statistics in psychology, criminology, and sociology) as unfit.

Invisible Politics

Ellison's concern with *civic* paradoxes, and specifically the national promise of democracy constantly denied to black citizens, led him to affirm the psychological struggle experienced by many black people as both real and socio-politically produced, which he highlighted in an essay about LaFargue, "Harlem Is Nowhere."¹⁶ However, his investment in *national* life as the determining factor of psychological experience also led him, for a long time, to erase, make invisible, or simply not see the ways in which an irruptive black aesthetic within his novel already provided not a meditation on how to live within such a paradox (i.e. how to live within a theoretically "good" system—American democracy—through psychiatric treatment), but a way out of it, a political alternative. If one reads not for the "meaning" of his text, but for what it makes possible, then a set of material encounters and irruptions within his novel offer a way of understanding the disjuncture between the promise of democracy and the reality of racial oppression as an effect of a systematized epistemology that claimed knowledge of totality, but

¹⁶ See: Ralph Ellison, "Harlem is Nowhere," *Shadow and Act* (New York, NY: Signet, 1966).

which would never in fact be total, which could never deal with the material that exceeded ideology.

The event that brought the invisible man under psychiatric treatment operates as an especially important node within the novel in that it highlights the ways in which political action is managed within the political system of the nation when the system is understood as total, and thus political disruptions understood as “treatable” via psychiatric means. However, that node also provides a point from which to expand the field of politics and political agency within the novel. The invisible man, having ambivalently succeeded at his first task at the Liberty Paint Factory (a scene in which he is instructed to put one drop of black in each bucket of white paint), is moved to the engine room to assist Lucius Brockway in making the paint base and controlling the machinery of the plant (206-207). From there he encounters a group of men striking at the factory, and learns that he has been hired as a scab. While the invisible man attempts to process what he has learned about the strike, Mr. Brockway accuses him of being a striker (and therefore a threat to Brockway’s own access to income). A fight ensues, and, with neither man paying attention to the machinery, a pipe bursts and explodes the section of the factory that makes the paint base, thus stopping all production (229-230).

The explosion accidentally instantiates what the strikers have been trying to accomplish: a stoppage of the means of production (though not necessarily to the desired ends). This unintentional disorganization of the factory seems to be perceived by the factory owners and its doctors as an act of sabotage, hence the narrator being treated for his “criminal” mind. Yet this is not the only incident in

which an “accident”—an unexpected encounter with material forces or disruptive embodiment—has real political effects, and in which a certain kind of political agency does not pass through proper political consciousness. (A similar event happens in the early pages of the novel, when the narrator’s accidental “belch” starts a train of events that lead him to embarrass his school’s headmaster in front of the school’s white benefactor, exposing their covertly racist arrangement, for which the narrator is kicked out of school.) However, the political effects of these material and bodily excesses are not fully controllable or controlled by a willful agency, nor do disruptive political events automatically engender fully realized political counter-consciousness.

As it turns out, despite readings of the novel’s politics as merely advancing liberal individualist ideology, within the novel itself politics is not a total symbolic field governed by a closed ideology. It is, rather, an open, material field in which various forces (such as the steam and electricity coursing through the factory) and unpredictable forms of embodiment (the belch) interact with and are caught up in an ideological politics that seeks to reduce and direct them. The irrational coursing through even the most rational systems, then, provides the means for the short-circuiting and/or freeing of energy for an improvisatory politics that is both more and less than legible in any conventional political sense. But it is, nonetheless, effective for engendering another realm, another space of political potential that must be realized in concert its material substrate rather than imposed upon it. The electricity that short-circuits factory production is the same electricity that courses through the invisible man in his shock treatment, and it is that same electricity that

the invisible man will siphon off in his battle against “Monopolated Light and Power,” letting loose “a hell of a lot of free current somewhere in the jungle of Harlem” (3).

Such events suggest that the stagnating effects of the civic paradox Ellison describes in his essays are reinforced by an incapacity to imagine a social formation beyond the nation and to fully encounter and improvise on the outside that is inside, the irrational traversing reason, which he nevertheless makes available within the pages of *Invisible Man*. His novel repeatedly gives evidence of the disruptive potential of that which is excessive to any system when viewed from an expanded political field through his technique of “dilated realism.” Yet Ellison, at least publicly, remained committed to a narrower vision of political desire: the aspiration to democratic citizenship within the nation. Still, Ellison’s relentless struggle to map the contours of what he perceived as a national paradox *through* dilated realism—that surreal realism that “gives one a slightly different sense of time,” in which “the swift and imperceptible flowing of time” gives way to “points where time stands still or from which it leaps ahead [, and] you slip into the breaks and look around” (Ellison 8)—found him strangely in line with Einstein’s struggles with the quantum. Einstein’s struggles also resisted the ways in which statistics would “solve” and totalize quantum theory, papering over its supposedly irresolvable paradoxes, nullifying their epistemological force. He refused, again and again, to accept the limited statistical methods by which the Copenhagen Interpretation—and Heisenberg and Bohr specifically—had laid claim to a complete quantum theory that rejected the possibility of quantum realism, or, rather, a description of the quantum

world. But it would be Jackson who would not merely make the possibility of epistemological excess and its effects sensible but would also actualize a way of acting *on* such excesses that did not fully depend on visibility as the total horizon of political possibility.

Interestingly, despite wielding devastating critiques of the limitations of scientific practices that engendered racial science, neither Jackson nor Ellison found scientific pursuit irredeemable. For Jackson, the scientific study of criminology had erred in taking the *mad criminal* as its object, thus making invisible the madness of a larger system; criminological rationality makes the criminal hypervisible as an isolated object of study but invisible in terms of his experience of social reality by refusing to take the system itself under investigation. He describes a useful science as one that would recognize that racism, “stamped unalterably onto the present nature of Amerikan sociopolitical and economic life” produced “criminals and crime” that “arise from material, economic, and sociopolitical causes” (Jackson 18). For him, an inverted criminology that instead diagnoses the system, its perpetrators, and the “long chain of corruption” that enables it, is necessary: “You have to examine these people from director down to guard before you can logically examine their product” (Jackson 19).

Ellison’s life similarly evinced an ambivalent, and even hopeful relationship, not merely to psychology, but to scientific methods and their visual technologies—if and when they are transformed and used against the dominant history of racially oppressive practices. Shelly Eversley has documented his work with the psychiatrist Frederic Wertham and Richard Wright to establish LaFargue Clinic in Harlem,

where he advocated for a “social psychiatry” approach that diagnosed the psychological turmoil of black people as a result of the racist conditions of the US’s supposed democracy (Eversley 445). Similarly, Sara Blair argues that despite his clear indictment of photography’s use within sociological and “documentary” disciplines for producing racial types and stereotypes, Ellison was a life-long photographer, producing portrait, documentary, and avant-garde photography (Blair 113). Even the documentary approach of sociological writing or “realism” that Ellison seemed to reject in favor of parody and irony finds itself reappearing in the mutated form of “dilated realism.”

What Ellison seems to reject in each of the sciences he criticizes is its supposedly transparent relationship to and knowledge of its objects—often guaranteed through technologies of vision—and especially what Selisker suggests is the “more general” tendency of these science, implicated in “mid-century technocracy [...] to define and solve social problems by manipulating them from afar” (Selisker 572). Another way to describe these technocratic sciences might be to say that they necessarily magnify the distinction between subject and object, placing even greater distance between them, and emphasizing the subject’s value as being its capacity for disinterested knowledge of the object. The epistemological separation between the subject-scientist-observer and his racialized object seems to increase at this moment precisely because increasingly *visible* racial unrest threatens to collapse such a distinction.

Ellison’s novel, in exposing the violence of a purportedly disinterested scientific observer, hardly seems to make a claim for the narrator’s potential status

as a subject who could, in turn, assert mastery or knowledge over other objects. Recognition can hardly be the desired end, for as the invisible man notes, “It’s sometimes advantageous to be unseen” (Ellison 3). Instead, Ellison’s novel—albeit with ambivalent results—takes seriously the question of what it means to be both epistemologically and ontologically on the side of impossible unseen objects—objects that in their hypervisibility and transmogrification into what Mark Seltzer has called “statistical persons” (Seltzer 5)—have been rendered and are invisible, inaccessible in their reality. To think on the side of the object would require accepting that the subjugating production of regimes of visibility *affects* objects, but also and more importantly that it does not fully determine them. Being on the side of the object allows for an investigation of the forces that affect an object beyond vision—which are also the conditions of possibility for a political agency that expands the field of the political, beyond the limits of visibility. It also allows one to take seriously the unknowable being of the object that, in its invisibility, experiences and improvises on the epistemological and material excesses that structural scientism’s reification of vision seeks to eliminate. This is one way that Ellison’s novel participates in what Fred Moten has described as “the history of blackness,” a history that is “a testament to the fact that objects can and do resist” (Moten *Break* 1). Such participation begins to link Ellison’s work to the larger “aesthetics of the black radical tradition” that Moten theorizes, despite the conventional interpretation of Ellisonian politics.

The Desire for Realism: Physics and Standpoint

The question not so much of what it *means*, but *how to be* on the side of the object, *what is possible on the side of the object*, also links Ellison's novel, his formal concerns, and his writing practice to the internal debates of quantum theory that traversed Ellison's lifetime. Quantum physics can be understood as the scientific investigation of the world at the limits of its knowability, across its strangest, tiniest, fastest, and most distant features. The field is largely considered an esoteric discipline in that much of the quantum world is non-intuitive, both in terms of sensibility and descriptive possibility—it requires interpretation in order to speak about the non-obvious features of the world. And quantum theory of the world exposes its interpretive limits when it meets entanglement. Interactions between objects that cannot be explained in terms of causality represent a great challenge to science itself, which, from Kant to the present, has been founded on the investigation of causal connections. Einstein cautioned, “Abandonment of causality, as a matter of principle, should be permitted only in the most extreme emergency” (Pais 420).

The golden age of quantum theory was constituted by a series of debates about precisely such an emergency. They were largely fueled by a disagreement between, on the one side, Niels Bohr, Werner Heisenberg, and what would come to be known as the Copenhagen Interpretation, and Albert Einstein, Erwin Schrödinger, and the challenges of the EPR (Einstein-Podolsky-Rosen) paradox on the other. The Copenhagen Interpretation insisted that there was a split between

the quantum world of matter (such as subatomic particles and light quanta), which could not be perceived directly, and the classical world of larger objects (such as, to use Schrödinger's example, cats), which could. While the classical system, which is always the side of the observer, could be known and described with a form of scientific realism, the quantum world is ontologically determined and epistemologically accessible only through statistics and probability, and then only incompletely, as an effect of the observer. The Copenhagen Interpretation holds that quantum realism is impossible. But Einstein was dissatisfied with an interpretation that explained away its internal paradoxes as mere epistemological effects of an "uncertain" ontology determined by observation.¹⁷ He evinced an insistent belief in the reality of the object in the absence of observation and spent the rest of his life striving to describe the reality of the quantum object and attempting to link the classical to the quantum world. We might say that Einstein, like Ellison, struggled to produce the "dilated realism" that would connect, describe, and create worlds that both are from and *are* this world, and in doing so, he affirmed his *belief in the world* beyond his own knowledge of it.

Philosopher Gilles Deleuze suggests that the philosophical advent of *empiricism* is marked by a turn away from "knowledge," and turn toward "belief in

¹⁷ It is important to note that within Heisenberg's theory of quantum uncertainty, the "observer" does not name a subject position nor does it imply cognition, but instead names any element of the classical world that interacts with the quantum world; according to Bohr and Heisenberg, such interaction is required to give variables to the wave function (a mathematical formula) that explains an uncertain quantum particle, thereby determining it and make it known. Ultimately, "observer" is defined tautologically as "that which collapses the wave function." Heisenberg, *Physics and Philosophy*, 137.

the world" (Deleuze, *Cinema* 172). For Deleuze, belief in the world enables the possibility of fundamentally undermining existing values (those imagined be the results of progressivist knowledge) and producing new ones in the continual and disruptive hope of describing the world "as it is." Belief in the world provides a way of responding to intolerable conditions of this world by recognizing that man is in and of the world, not separable from it via cognition or transcendence; it is a way of restoring a connection to the world across and by way of "the cut" between self and world, and affirming thought as a thing in and of the world (Deleuze, *Cinema* 170). The move from classical to quantum physics (which Heisenberg also described as happening across "the cut") already indicates the possibilities of empiricism that Deleuze signals. Einstein's persistent push for a full description of the quantum world, and his dissatisfaction with statistical approximation, evidences a pursuit in which "thought itself [is understood] as an act of belief, an experiment, a force to create new values" (Deleuze, *Empiricism* xx). But, importantly, this invokes the possibility of an empiricism not synonymous with positivism, but one that nevertheless affirms sense perception as the form of experience, and affirms it all the more strongly by suggesting that even our sense of *sense perception itself* is not fully intuitive, transparent, or known.

Einstein's *belief in the world* and its capacity to engender new forms of agency was not deterred by his repeated failure to complete the description he hoped would join the classical and quantum worlds—although that desire and its failure would hinder both the narrator of *Invisible Man* and Ellison himself from recognizable political action. Instead, Einstein spent the last twenty-three years of

his life, after his immigration to the US, involved in an on-the-ground struggle for racial liberty—an involvement that has, in the records of Einstein's life, been made invisible.¹⁸ Fred Jerome and Rodger Taylor, authors of the only book detailing Einstein's deep and varied engagement with racial struggle, *Einstein on Race and Racism*, point out:

More than one hundred biographies and monographs about Albert Einstein have been published, yet not one of them mentions the name Paul Robeson, let alone Einstein's friendship with him; or the name W.E.B. Du Bois, let alone Einstein's support for him. Nor does one find in any of these works any reference to the Civil Rights Congress whose campaigns Einstein actively supported. Finally, nowhere in all the ocean of published Einsteiniana—anthologies, bibliographies, biographies, summaries, articles, videotapes, calendars, posters and postcards—will one find even an islet of information about Einstein's visits and ties to the people in Princeton's African-American community around a street called Witherspoon. (ix)

Even though Einstein, in his flight from Nazi Germany in 1931, might be considered part of the Jewish diaspora, Jerome's and Taylor's detailing of his American life, lived largely in and with Princeton's black neighborhoods, finds Einstein further entangled by way of the node in the black diaspora that is Witherspoon Street, Princeton, New Jersey. And Einstein encouraged rather than rejected such entanglement. In fact, Jerome and Taylor note, Einstein's entire FBI file—compiled

¹⁸ Echoing Ellison's narrator's claim that the invisibility of black people is caused by a defect of the white (liberal) observer, Einstein stated publicly that segregation "is not a disease of colored people, but a disease of white people" (Jerome and Taylor 88). Significantly, however, for Einstein the register changes to that of biology and epidemiology, thus eliminating even a metaphoric reference to the problems within physics.

by J. Edgar Hoover to track Einstein's communist activities—consists almost entirely of documents of his anti-racist activism.¹⁹

But just as texts detailing Einstein's accomplishments in physics put his anti-racist engagements under erasure, Jerome's and Taylor's monograph discusses his physics work only peripherally, and suggests no link between Einstein's scientific inquiries and his anti-racism. Though they do not cite Einstein's own perception of the relationship between his scientific work and political activism, their decision may have been influenced by it. He once stated, "My love for justice and striving to contribute towards the improvement of human conditions are quite independent from my scientific interests' (Dukas and Hoffman 18). But, although Einstein overtly rejected a continuity between his scientific work and his struggles for social justice, it would seem that his contributions to rejecting pure positivism for quantum physics—both in his affirmation of the possibility of hidden (invisible) variables and his heuristic refusal of the statistical treatment of electrons—has implications for the positivist assumptions that undergird and give power to racial science *as* science, bringing its foundational assumptions into question. Moreover, his reflexive understanding of scientific practice—one that led him to claim that "the theory determines what we can see"—has implications for the practice of science more generally, especially as it bumps against and attempts to determine lived experience by way of moral prescription. For Einstein, *invisibility* was a consequence of a

¹⁹ Jerome and Taylor suggest that one irony of J. Edgar Hoover's racism and his tendency to equate anti-racism with communism (which were, for him, both national enemies) is that Einstein's FBI dossier contains the only detailed documentation of his anti-racist activities, many of which would have, otherwise, disappeared completely (Jerome and Taylor 103).

particular theoretical standpoint; it is not the material world that is the limit, but theory, especially a theory that does not make a place for or acknowledge the possibility and reality of invisible objects and forces. And it is the theory that must be revised and improvised to accommodate material disruptions that such preemptive erasure threatens to make inaccessible.

The possibility for the emergence of quantum theory can be attributed to Max Planck, who in 1900, developed a “black box” technology—a container with black inner walls through which light of various frequencies could pass and be absorbed—that enabled him to count the energy carried by light. Using the same technology, and building on Planck’s formulations, five years later, Einstein was able to show that light at especially high frequencies behaved as though “mutually independent energy quanta,” or “atoms of light” which would become known as *photons* (Gilder 27). “Quanta” is the word for the smallest discrete particle involved in any physical interaction. This mediated observation that light might be separable into discrete entities enabled an investigation of matter at even more infinitesimal sizes—at levels that were otherwise, and prior to the conceptualization of the light quantum, invisible. The investigation of the quantum led to “observations” (and, again, the term becomes especially porous for quantum physics, often indicating effects, thought experiments, or mathematical extrapolations) about matter that were not only *invisible* but *could not even be described in terms that could be visualized*. For example, the electron (a subatomic particle that carries an atom’s charge) was observed to require *two spins* to complete a single rotation—an unvisualizable phenomenon (how could you spin twice to go once around?) that led

to the particle being given, temporarily, the unwieldy name, “spin-one-half-particle”—even in language it was difficult to represent, and “spin” itself was only a poor approximation of the electron’s actions.

Such non-intuitive features of the quantum world meant, as science historian Louisa Gilder notes in *The Age of Entanglement: When Quantum Physics Was Reborn*, that quantum theory signaled “a drastic break with the past history of science” in that it required a theory and interpretation in order “to speak about the natural world.” In “a classical (i.e. pre-quantum) equation, after its terms were defined, [it] essentially explained itself,” whereas for the quantum, “equations fell silent” (Gilder 4). The quantum physical theory of the world exposes its own limits when it meets entanglement, thus making a continued mystery of entanglement as a non-causal phenomenon—which brings science at its most daring dangerously close to pre-Enlightenment magic—and thus making entanglement a site of scientific and lay curiosity.

Gilder’s text joins a growing number of popular histories of quantum physics told from the point of view of entanglement,²⁰ but hers is especially useful in that, while it is constructed in narrative/progressive form (with entanglement being the connecting thread), it is told almost exclusively in the language and words of the scientists involved, taken directly from their own writing, and places the developments of quantum physics within the social and affective contexts of their

²⁰ See: Amir D. Aczel, *Entanglement* (2003); Brian Clegg, *The God Effect: Science’s Strangest Phenomenon* (2009); Sameer Ketkar, *Entanglement* (2011); Valerio Scarani and Rachael Thew, *Quantum Physics: A First Encounter: Interference, Entanglement, and Reality* (2006), etc. etc.

lives. Their debates, and specifically the struggle to make *thinkable* both entanglement and the behavior of electrons, highlight the discontinuity among observation, description, and *meaning* that were often presumed to be continuous and transparent within positivist science, and thus they speak back to those sciences that would depend on such presumptions.

After the Solvay Conference in 1927, what was known as the “Copenhagen Interpretation” (developed by Niels Bohr and Werner Heisenberg among others) became the orthodox interpretation of quantum theory. The Copenhagen Interpretation holds that quantum systems are fully described by a wave function (a mathematical formula), not fully measurable (uncertain), and contingent upon the observer. While much of the Copenhagen Interpretation would eventually hold up to physical experimental testing, Bohr’s and Heisenberg’s assumptions that the quantum theory was “complete” in their hands because it had reached the point at which quantum epistemology and “objective reality” became incompatible—it simply was not possible to *think* further the conditions of the world—would not.

Bohr and Heisenberg held that neither images nor language, which were tools of the “classical” world, was adequate to a description of the quantum world (Gilder 5, 42), yet because the classical world was the side of the apparatus (the observer), any description of the quantum world was only possible by making the quantum world *interact* with the classical world (by, for example, observation). For Heisenberg, this meant that a quantum theory that could cohere with classical theory is impossible. He describes this impossibility, saying:

Both on the quantum mechanical side, with the object, and on the classical side, with the apparatus, [...] the laws of that side hold precisely. The statistics come in here [...] at the *Schnitt* [the Cut]. You can't measure a particle without disturbing its causal course.

Now, if you were going to hope for, as you said, 'new formulas and rules' to be added to the quantum theory and bring causality back to it, they have to enter along the *Schnitt*. But the *Schnitt* can always be moved—you can always describe something quantum mechanically which you were describing classically before; you can always include a little more of your apparatus in the quantum mechanical system, as long as some part of the apparatus remains classical. But when the *Schnitt* moves, a contradiction between the law-like consequences of the new hidden properties and the more fluid relationships of quantum theory will be unavoidable. (Gilder 152-153)²¹

The quantum theory, then, had to be considered complete without being able to bridge the *Schnitt*, the cut. For Heisenberg, then, what Einstein exposed as a paradox was not an ontological reality, but merely an effect of an epistemological/observational problem. This effect that could be resolved through statistics, but any attempt to *describe* what would happen across the cut would have to be abandoned. His and Bohr's dependence on statistics and mathematical formulations (especially those of John Von Neumann) led them to suggest that quantum physics does not deal with an *objective reality*, but only with the *probabilities* that are related to classical formulations such as "measurement" or "observation." Epistemology then gives ontology as data, and it is in this way, according to Heisenberg's Uncertainty Principle (in which position and momentum

²¹ Gilder here draws from both an unpublished paper by the physicist Gretta Hermann, who details her conversation with Heisenberg in it, and from Heisenberg's 1935 speech in Vienna, given in response to the EPR paper. See also: David C. Cassidy, *Uncertainty: The Life and Science of Werner Heisenberg* (New York, NY: W.H. Freeman & Co., 1991).

are not simultaneously knowable, and knowledge of one affects the reality of the other), that the observer creates the world by collapsing any given set of possibilities and determining ontology.²² For Heisenberg and Bohr, knowledge about the world eliminates ontological multiplicity.

It was precisely this aspect of the Copenhagen Interpretation—the turn away from a belief in the relationship between “objective reality” and thought and an embrace of a probabilistic explanation of the world—that Einstein, with his belief in the world, challenged. He felt that quantum physics had taken “an exaggerated turn towards formalism,” which obscured any connection between form and its expression in the world (115). This propelled his continued attempts to develop a thought experiment that would convince Bohr and Heisenberg of the implications of “spooky action at a distance.” These attempts found their most refined expression in a thought experiment described in the Einstein-Podolsky-Rosen paper, “Can Quantum-Mechanical Description of Physical Reality Be Considered Complete?” and came to be known as the EPR paradox. Building on the possibilities of a box containing light that had marked the inception of quantum physics, Einstein, with two of his students, Podolsky and Rosen, wrote up both the thought experiment and its implications. They invoke two ‘systems’ (be they particles or boxes), which interact and then separate. From a measurement of momentum on one system, the

²² It is important to note that within physics, the “observer” is not a subject position and does not imply cognition, but rather names any element of the classical world with which the quantum world interacts, thereby bringing it into the purview of the classical world—the only site at which (according to Bohr and Heisenberg) it could be known. Ultimately, “observer” is defined tautologically as “that which collapses the wave function” (Heisenberg, *Physics and Philosophy* 137).

experimenter can learn the momentum of the far away, untouched system. But if the experimenter decided to measure the position, instead, the position of the faraway system could be computed from the quantum-mechanical wave function of the nearby one. They write:

If, without in any way disturbing the system, we can predict with certainty the value of a physical quantity, then there exists an element of physical reality corresponding to this physical quantity. [...] One would not arrive at our conclusion if one insisted that two or more physical quantities can be regarded as simultaneous elements of reality only when they can be simultaneously measured or predicted. [...] This makes the reality of P and Q [position and momentum] depend on the process of measurement carried out on the first system, which does not disturb the second system in any way. No reasonable definition of reality could be expected to permit this. [...] While we have thus shown that the wave function does not provide a complete description of the physical reality, we have left open the question of whether or not such a description exists. We believe, however, that such a theory is possible. (Einstein, Podolsky, and Rosen 777-778)

Importantly, like the thought experiment of Schrödinger's Cat, the paradox of spooky action at a distance demonstrated by EPR (in which physical interactions could exceed the limits of information transfer given in Einstein's Special Relativity formulation) was not meant as an affirmation of that spooky action, but as a challenge to the completeness of the theory: *if* such a paradox was possible *within* the theory, then something was amiss with the theory itself; epistemology and ontology were not coextensive. For Einstein, this meant that the problems of physics, while depending on a belief in ontological reality, were themselves epistemological, but, in opposition to Heisenberg and Bohr, it did not mean that that one ceased to talk about (or ceased trying to talk about) real phenomena. As Gilder describes it, Einstein found the implications of the Copenhagen position "ludicrous":

“Do you really believe that the moon is not there if nobody looks?” (3). And he rejected Heisenberg’s and Bohr’s abandonment of causality—the cornerstone of the majority of scientific thinking—as too easily accepted.

The EPR paper also prompted the most famous thought experiment in all of physics: Schrödinger’s Cat. While Einstein’s formulation was designed to highlight the possibilities of spooky action at a distance that the Copenhagen Theory had yet to contend with, doing so also meant a rejection of the completeness of the collapse of the wave function explanation that Heisenberg’s principle implied. Schrödinger focused explicitly on the paradox produced if the collapse of the wave function was applied to macro (classical) systems. Light can be observed (by its effects) to behave as both a wave and a particle, but while the epistemological effect of Heisenberg’s theory is that position and momentum of a wave/particle cannot be simultaneously known. The *explanation* for why that is so is that, prior to being observed, a quantum wave exists in a state known as “superposition”—in which all its possible states are simultaneously existent—and “observation” (which here, in the strict sense, means interaction with the classical system) collapses the superposition, transforming it into a discrete, linear system (e.g. knowing position makes position discrete rather than multiple).

For Schrödinger, this interpretation established a false disjuncture between the classical (macro) world and the quantum (micro) world. Schrödinger rejected this separation because the classical world is made of the same elements as the quantum world. He describes his objection thusly:

A cat is penned up in a steel chamber, along with the following device (which must be secured against direct interference by the cat): in a Geiger counter, there is a tiny bit of radioactive substance, so small that perhaps in the course of the hour, one of the atoms decays, but also, with equal probability, perhaps none; if it happens, the counter tube discharges, and through a relay releases a hammer that shatters a small flask of hydrocyanic acid. If one has left his entire system to itself for an hour, one would say that the cat still lives if meanwhile no atom had decayed. The psi-function [the mathematical expression] of the entire system would express this by having in it the living and dead cat (pardon the expression) mixed or smeared out in equal parts. It is typical in these cases that an indeterminacy originally restricted to the atomic domain becomes transformed into macroscopic indeterminacy, which can then be resolved by direct observation. That prevents us from so naively accepting as valid a 'blurred model' for representing reality. In itself, it would not embody anything unclear or contradictory. There is a difference between a shaky or out-of-focus photograph and a snapshot of clouds and fog banks." (Schrödinger 328).

For Schrödinger, it was obvious that the cat was *either* dead or alive, and not "smeared out in equal parts." The impossibility of translating the mathematical expression of the micro world to that of the macro implied, for Schrödinger, a failure of the Copenhagen Interpretation to describe not only the macro world, but also the micro world. Moreover, even as the experiment points to the obvious power and *potential* for danger inherent in quantum experimentation (that of using a decaying atom to release a radioactive substance—and at great distance from the experimenter), it also expresses the ethical violence inherent in acting based on a statistical model, as though it accurately and transparently described reality, when in fact what the statistical model expresses is "blurry" and probabilistic. Schrödinger suggested, over and over again, that perhaps "position" and "momentum" were not accurate variables for describing the quantum world—they did not exhaust the

possibilities for a description of reality—and therefore resulted in the interpretation of a “blurry” picture, when in fact, what one might be looking at was a picture of the cloud bank.

It was in the course of developing this experiment that Schrödinger conceived of and gave the name “entanglement” to Einstein’s spooky action, which began to gesture to new descriptive possibilities for seeing the cloud. Entanglement would engender multiple alternatives and supplements to the Copenhagen Interpretation, including that of “hidden variables” theory. Though the phrase “hidden variables” wouldn’t emerge with regards to the quantum theory until the work of David Bohm several decades later, Einstein’s and Schrödinger’s thought suggested the possibility of *hidden variables*, the possibility of something beyond “position” and “momentum,” for which the supposedly indisputable mathematical formulations of Von Neumann—whose work had been used to guarantee the Copenhagen interpretation—did not account.

Von Neumann’s formulations had helped to totalize or close the epistemology of quantum systems by closing systematic possibilities, limiting them to position and momentum. It produced a *statistical totality* and descriptive limit that could not account for a total world that exceeded it. As it would turn out, then, uncertainty was an effect of treating “nonseparable things as separable” (Gilder 113). Importantly, the mathematician Gretta Hermann demonstrated this mathematically (thus refuting Von Neumann directly) to Heisenberg in the 1930s. She argued—primarily in an attempt to recover Kantian causality for science—that either position or momentum of a light quanta could not be known because light

existed *as a wave and particle at the same time*, and thus, would not *have* the quality of position and momentum at the same time—“uncertainty” was merely an epistemological misnomer for an undescribed quality of the object (Gilder 151-153).

Ultimately, Einstein’s insistent invocation of the epistemological implications of “spooky action at a distance,” and his repeated skepticism about the ontological existence of such noncausal interaction, which Schrödinger named “entanglement,” led, again and again, to an empirical investigation of the possibility of just such a phenomenon. Entanglement would turn out not to be a paradoxical feature of the theory that could be attributed to its epistemological limitations, but instead, a spontaneous and inexplicable ontological feature of the quantum world as described by quantum physics. Physical experiments eventually eliminated the possibility of *local* hidden variables that might explain away the apparent non-causality of entanglement; yet the insistent presence of the paradox—one that was eventually shown to exist empirically—produced a world whose causality might be inexplicably non-local, a kind of diasporic scattering of objects affecting each other beyond the limits of historical causality. “Entanglement” persisted as a concept that named the *invisible*, non-local causality, the impossible bond that links objects scattered in space and time. And although the Copenhagen Interpretation remains the most widely accepted theory of the quantum today, its most serious contender—and the only theory that reconciles “spooky action at a distance” with relativity—only became thinkable through the persistent epistemological and

ontological disruption of entanglement: multiple worlds interpretation.²³ Thus, it is precisely *through* Einstein's objections, through his desires for a causal and more fully systematic *description* of the world, that the non-causal, unpredictable descriptions of the world could become visible, and that an ontological multiplicity of worlds, and the ontological non-determination of *this world* becomes epistemologically possible for science.

Beyond Visibility: Reading and the Matter of Sense

I am less concerned here with what is (or might be) ultimately “proven” for and by quantum physics. After all, it took more than 30 years from the time of the inception of the Copenhagen Interpretation (1927) to John Bell's re-invigoration of the EPR problem (1964) for the real implications of Einstein's objections to become visible for quantum investigation, and even today, the theory still today struggles to cohere with classical physics. Rather, I am concerned with the ways in which presumption of the totality of coherent systems limits both the possibility of observing the “impossible” and makes invisible the incoherent, forming objects that constitute and traverse them. I am particularly interested in is the ways in which

²³ The multiple worlds interpretation is largely enabled by the Schrödinger's Cat thought experiment. The Copenhagen Interpretation glosses over Schrödinger's paradox, assuming that the wavefunction and its collapse are *statistical* explanations of the quantum, but not the classical, world. Multiple Worlds Theory, by contrast, holds that wavefunction has an *objective reality*, and so, the collapse of the wavefunction is not actual or total. Therefore, it does not determine and produce the only possible world; instead, all the possibilities of the wavefunction play out in multiple pasts, futures, worlds, and universes.

both ontological and epistemological possibilities are opened up by a scientific perspective that insists on the “reality” of invisible objects and the potential reality of invisible worlds: How did theoretical physics open up the possibility of *the world being other than it is* precisely by being *as it is*? I am interested in how thought becomes possible, and how the thought of the unknown and *unknowable*, rather than total knowledge, might contribute to not only our understanding of aesthetics and politics, but also to their ontological possibilities. I’m interested in how conditions of possibility were and are actualized, and what that says for the relationship between epistemology and ontology (especially insofar as it actually casts doubt on the fantasy that ontology could ever be fully determined by epistemology)—both of which speak to the possibilities for scientific processes to help explicate humanistic, aesthetic, and political ones. But an understanding of these scientific possibilities would not contribute to our understanding of aesthetics and politics by explaining their meaning; it would do so instead by expanding the field of continuity and comparison, highlighting the ways in which all three are *processes* that involve each other.

Such potentials bear heavily on understanding the ways in which Ellison’s and Jackson’s “failures,” like Einstein’s, are actually the site of ontological possibility, of the possibility of opening up ontology. Many concepts, including “entanglement” and “the cut,” and metaphors of visibility (such as Schrödinger’s blurry photograph) developed within quantum physics, also traverse and are central to discourses that seem unrelated, such as those of the black diaspora. Bringing them together helps to explicate the ways in which the *processes* of both Ellison’s and Jackson’s writings

operate as thought experiments. They act as checks on visibility and opportunities for the creation of new values in much the same way as those of theoretical physics (rather than those of the social science). It also highlights the ways in which what Einstein makes possible for physics relates to what Fred Moten claims that certain events that constitute the black radical tradition do for politics: They show that “Something real—in that it might have been otherwise—happened” (Moten 196). And perhaps something real that *is* otherwise also happened. Importantly, they show how writing *about* experiments—such as that of much scientific practice and of Ellison—can through their organization and meaning-making work to erase both their own experimentation and the appearance of an “otherwise.” Conversely, other experimental writing—such as those of Jackson—can work towards actualizing and multiplying experimentation and/with the otherwise.

If, as Einstein believed, theory does not determine reality, but it does determine what we can see, then the affirmation of ontological multiplicity and the possibility of the unseen unseeable *within* physics is not divorced from politics, but imbued with and instructive of political possibility. This is all tied up with the aesthetic determinations and suppressions that constitute visibility, and which traverse physics—including the struggles over formalism and realism—thus demonstrating the ways in which quantum theoretical determinations are largely aesthetic: they deal with organizations of the sensorium. The important thing, then, is not that physics somehow *proves* ontological multiplicity, but rather, that it makes possible for thought within science—as politics and through aesthetics—the *material reality* of being other than what is, even if such an “is” remains unknown

(or because it remains unknown), except as possibility. It refuses the very certainty of what “is.” It produces, to put it in Foucault’s terms, “the thought from Outside,” which serves as the grounds for political possibility, without knowing or thinking the *particular* “is” that such an outside might constitute (Foucault, “Thought” 16). And this matters because the social sciences that have operated as guarantor for social and political policy have adapted their empirical methods from a science that has largely grounded itself in a closed conception of ontology. Such a thought from the outside, then, such a theory, can make visible an entirely different possibility for politics, a politics that would not depend on a totalization through ideology (a “closed” theory) or on a determinate and closed ontology, but would instead depend on an engagement with unpredictable materiality and excess (that irrationality which is an interior outside to any supposed ideological totality) in ways that are not determined in advance. And this excess and irrationality would not be seen as a problem to contend with, but would instead constitute an opportunity and potential for, in’s terms, improvisation, or “speech without foresight” that is simultaneously “a kind of foreshadowing, if not prophetic, description” (Moten, *Break* 63). Physics becomes, in this moment, like the biology described by Richard Doyle (in Chapter 1): science “at its best,” open to its own “extraordinary capacity for surprise,” through practices of open description rather than systemic explanation (Doyle 105).

For Moten, evidence that “something real—in that it might have been otherwise—happened” actually leads to “the possibility and project of a utopian politics outside ontology” (197). Here, ontology, as Moten uses and rejects it, names something different than what ontology becomes through entanglement (open and

multiple); instead, it names the *determinate isness* that is totalized and reified and made known as science and history, Knowledge, and which refutes other possibilities. However, this material reality—a “powerfully *material* resistance”—operates against, critiques, and cuts any such supposedly Enlightened “knowledge” that would operate in “those authoritarian modes of (false) differentiation and (false) universalization (ultimately the same thing) that seem to have ontology or the ontological impulse as their condition of possibility and seem to indicate that impulse or activity could never have ended up any other way” (196). And for Moten, one way of getting at this ontological questioning is remarkably similar to that last important gesture of Schrödinger’s thought experiment: through the photograph. For both, such ontological questioning requires a special attunement to ways of reading that can experience the photograph through reading and also to the photograph beyond reading. This leads Moten to describe a kind of “reading” not wholly dependent on vision and semantics, a practice of “critical reading” that is more like creative reading, in which reading itself doesn’t seek inside the object only for signifiers and meaning *as* knowledge, but adds to and improvises on the excesses inherent in and made possible by such an object. His description of this practice suggests that for us to read and improvise on these texts, we, as critical readers, have to be open to their opening of ontology—both *within* and *onto the outside of* their writing.

For Moten, the privileging of the visual *as* the knowable *as* ontology (“what is”) leads to a reading practice that privileges hermeneutic *knowledge* and evacuates the materiality and material possibilities of objects. And, as he makes clear through

an analysis of photography—a technology that was largely implicated in the development of racial science as a guarantee of its objectivity—such a privileging comes to have pernicious consequences with regards to black experience in the US, and in particular to black radical politics and its sense-ability (rather than its visibility) in the emergence and continuation of a black radical tradition that is actualized via an attunement to the sensorial beyond sight (to that which is constructed as nonexistent in a systematic theory of politics and ontology that defers to sight alone). It also has consequences for the sensibility of the politics of *Invisible Man*, politics that I will suggest are not analogous to the late-life dogmatic nationalism and anti-radicalism of Ralph Ellison that can be inferred from his speeches and essays.

The title of Moten's book, *In the Break: The Aesthetics of the Black Radical Tradition*, is also given in the prologue of *Invisible Man*. "Invisibility," the narrator explains:

gives one a slightly different sense of time, you're never quite on the beat. Sometimes you're ahead and sometimes you're behind. Instead of the swift and imperceptible flowing of time, you are aware of its nodes, those points where time stands still or from which it leaps ahead. And you slip into the breaks and look around. (Ellison 8)

The idea of the break is part of Moten's primary concept for understanding black radical aesthetics: the cut. This cut resembles Heisenberg's *Schnitt*, but for Moten, one doesn't skip from incommensurable side to incommensurable side, but lingers in it. Unlike Heisenberg's "cut," which Heisenberg insists is impossible to get at, impossible to get inside, for Moten the cut produces a break, invaginates any

totality; it doesn't split worlds, but connects and expands worlds as it cuts, making an excess of differentiation, augmenting any totality with difference, with the impossibility of totalization. It is the cut that produces a break, the impossible "between" of time; and getting inside it opens up new possibilities for ontology (in the same sense entanglement opens up) and for politics.

For Moten, "the hegemony of the visual" (Moten 198) that structures Enlightenment thought is enabled by "authoritarian modes of (false) differentiation and (false) universalization" (196) that divide the senses from an anoriginary synaesthesia into sight, hearing, smell, touch, taste, and reduces the others at the expense of the one. With regards to photography, he is particularly interested in "the reduction of the phonic substance" of the photograph, and specifically the photograph of Emmett Till's open casket as his funeral (201). But, Moten suggests, that "(false) differentiation and (false) universalization" is constantly being "cut" by the sensorial experiences that have been reduced; "the hegemony of the visual" is cut by the sound of "various shrieks, hums, hollers, shouts, and moans" that can be heard if one "really listen[s] to the photograph" (201-2). The photograph has a phonographic content as well, and that phonographic content can move us towards understanding the potentials for collectivity that inhere in the multiplicity of the unseen (unseeable) of visual objects.

Moten's identification of a tendency towards the "reduction of the phonic materiality" of the photograph allows him to level a devastating critique of Roland Barthes's *Camera Lucida*, a text that is a touchstone for many analyses of photography, and which helped pave the way for a hermeneutic method of

photographic reading that places itself in opposition to a documentary tradition, and locates the site of politics in an always only personal experience of reading for meaning. “Blackness,” as a concept and in the form of photographed black subjects, runs throughout Barthes’s work. Moten suggests that within *Camera Lucida*:

Blackness is the site or mark of the ideal object, the ideal spectator (and these are everything for Barthes’s analytic since the doing or operation of photography is bracketed and set aside early in *Camera Lucida*). Blackness is the embodiment of a naiveté that would move Barthes, the self-styled essential phenomenologist, back before culture to some pure and unalloyed looking. (203)

The bracketing out of “the doing [...] of photography” is worth some attention, and I will return to that later. But here, I am interested in Moten’s interest in Barthes’s interest in—and desire for—“pure and unalloyed looking.” This desire leads Barthes to reject news photographs as “unary,” or unified, lacking the “punctum”—the prick—that would give meaning to the photograph for the viewer. “In these images,” Barthes says, “no punctum: a certain shock but no disturbance; the photograph can ‘shout,’ but not wound” (quoted in Moten 204). Barthes separates these photographs from the essence of Photography that his book is written in search of. And, Moten argues, “Barthes’s critique of the unary *photograph* is based on the assumption of the unary sensuality of *photography*. And this is a prescriptive assumption—photography ought to be sensually unary, ought not shout so that it can prick. Wounding photography is absolutely visual” (204-5, emphases mine). It is precisely the multiplicity of the sensual and sensory in the supposedly unary photograph that Barthes shuts out in his desire for the unary—which is to say visual—sensation of the wound. Barthes search for an originary photographic

essence requires “the exclusion of the sound/shout of the photograph” (205), a move that Moten accuses of mirroring “the fundamental methodological move of what-has-been-called-enlightenment [wherein] we see the invocation of a silenced difference, a silent black *materiality*, in order to justify a suppression of difference in the name of (a false) universality.” *Reading the photograph for meaning or essence* shuts down sensorial excess beyond the visual that inheres in the photograph.

To pay attention to the noise, to hear it, would be to disrupt our sense of what it means to produce meaning from a photograph, of what it means to “read” for meaning and politics, a way to move away from *explanation* (which depends on knowledge of a working totality), and towards description: a way to think reading as an affirmation of difference, an additive act, rather than privileging a distillation of meaning and production of Knowledge.

In positing that this photo and photographs in general bear a phonic substance, I want to challenge not only the ocularcentricism that generally—perhaps necessarily—shapes theories of the nature of photography and our experience of photography but that mode of semiotic objectification and inquiry that privileges the analytic-interpretive reduction of phonic materiality and/or nonmeaning over something like a mimetic improvisation of and with that materiality that moves in excess of meaning. [...] These challenges are [...] something of a preface to a theory [of black performance] and an attempt to work out a couple of that theory’s most crucial elements: the anti-interpretive nonreduction of nonmeaning and the breakdown of the opposition between live performance and mechanical reproduction. All this by way of an investigation of the augmentation of mourning by the sound of moaning, by a religious and political formulation of morning that animates the photograph with a powerfully *material* resistance. (197-8)

In moving away from a valuation of “meaning” that is produced through interpretation and towards an embrace of the excess and nonmeaning (the “noise,”

the shout, the moan that interpretation and hermeneutics shy from), Moten suggests that we can start to get at the materiality of resistance, which is made possible by the “opening” of ontology that the cut names.²⁴

Interestingly, critic Sara Blair has argued that photography is a site within *Invisible Man* that demonstrates that Ellison’s novel is not as closed down to the excessive possibilities that accompany visualization and visual technologies as it might at first appear. In *Harlem Crossroads: Black Writers and the Photograph in the Twentieth Century*, Blair takes up the challenge of rescuing the aesthetic—and consequently political—possibilities of the visual, and in particular the photographic—in Ralph Ellison’s *Invisible Man*, but her affirmation of the excesses of the aesthetic and its political possibilities operates at a very different register than Moten’s. Her work speaks to the difficulties of extracting a reading practice that can be attuned to excess and absence if one is caught up in a tradition that reads the visual and the aural as *aesthetically distinct* rather than constitutive of—cutting and supplementing—each other. It is therefore useful to take a closer look at her reading.

As she notes, Ellison’s novel contains a deep critique of political power of in/visibility, and by most accounts, the novel indicts technologies of the visual, locating recuperative aesthetics in the aural—specifically jazz—and the literary. “Ellison’s work is [...] taken to exemplify the aperçu that, throughout their history and in response to the social conditions of their emergence, all black arts aspire to

²⁴ Although I do not address it here, for Moten, the materiality of resistance is all tied up with the mother, maternity, natality—hence the italicization of “mater” in materiality.

the condition of music [...]” (Blair 56). The few critics who have engaged with photography in Ellison’s novel have “written [it] off [...] as an instrument of the very logic of invisibility his novel seeks to probe” (58); that is, they have written it off as a sociological tool that in the late nineteenth and early twentieth centuries helped to naturalize race and class conditions through its supposedly evidentiary and documentary functions. Against such dismissals of the aesthetic and resistant possibilities of photography, Blair offers an exacting account—backed by extensive archival research—of Ellison’s lifelong engagement with photography. For the majority of his life, he supported himself through his portrait and journalistic photography, produced a vast archive of avant-garde photos, and had a “penchant for self-presentation as a photographer,” rarely being himself photographed without camera in hand (61). She goes on to show that for Ellison photography did not operate in opposition to jazz, but rather, like jazz, “photography serve[d] Ellison powerfully as a resource for the transformation of lived experience into narrative, of social fact into aesthetic possibility—and vice versa” (59).

But, in her photographic rescue-mission, Blair also reveals something about the politics of hermeneutic practice. In particular, two statements—one offhand, and one a pointed thesis—make clear what gets elevated and what gets denigrated in the theory that undergirds her hermeneutic practice. This hierarchical revelation begins to point to the difference that another kind of reading practice could make. In particular, she says, offhandedly, “As a body of work, these images [in Ellison’s personal archive] are scattershot and often experimental in the pejorative sense – that is, tentative or technically unrealized” (Blair 63). And, more pointedly: “For

Ellison, photography was no less than an interpretive instrument, a resource for critical reflection on American cultural practices and norms” (Blair 57). I take these statements to be to some degree “true,” which is to say, I neither doubt that Ellison used photography as a critical instrument, nor do I doubt that his photographs were themselves experimental and exploratory with regards to form. However, taken together, these two statements reveal certain now naturalized critical trends regarding how we “read” photography and understand its relationship to literature, trends that have embedded in them assumptions that make the cognitivized (which is to say *semiotic*) aspects of the visual the extent of the political possibilities of aesthetics, and which denigrate the experimental—at least in its “pejorative sense”—a sense that we might take to indicate the *process* of artistic production and/as aesthetic *experience*.

There is something in this valuation of the critical hermeneutic—its understanding as the *sine qua non* of photographic possibility (“no less”!)—and this denigration of experiment that, I would suggest, leads Blair to posit photography as “another” art that influenced Ellison’s writing, an art whose influence must be traced *separately* from his interest in music. But this isolation of the visual from the aural, this sectioning of the sensory, is something that if gotten around it will enable us to think the relationship between aesthetics and politics with regards to *visuality* and knowledge-production (especially *as science*) differently.

At the center of Blair’s chapter on Ellison, she offers a close reading of *Invisible Man*’s eviction scene (Chapter 13), a scene that Blair calls the narrator’s “encounter with the documentary.” This scene follows closely on the heels of the

narrator's escape from the Liberty Paint Factory Hospital, where he was sent after the factory explosion, and in which the doctors experimented on him with a "nonsurgical lobotomy" rather than healing his wounds. Still disoriented, the narrator hurries down the street where he stumbles upon an older black couple being evicted from their home. In Blair's reading, as the narrator struggles to make sense of the scene, his eyes scan the couple's belongings scattered on the street and land on "a nineteenth-century portrait of the couple being dispossessed" and "'a fragile paper, coming apart with age': the free paper's of the woman's husband" (Blair 68). She goes on to explain, "Photograph and text; image and testifying narrative: what the narrator encounters, in the form of these framing objects, is the twinned elements of documentary—specifically, the photo-text form so dear to progressive New Deal reformers and black post-war writers alike." This encounter with a photograph engenders "recognition," or a kind of critical knowledge, which then "spurs social action [...] a spontaneous oration on behalf of the evictees."

Here, Blair departs from a number of critics who have suggested that Ellison's text operates by modeling "proper" reading practices, training both the narrator and the reader to recognize visual and aesthetic grammars.²⁵ Instead, she argues that this scene is evidence that the narrator rejects the logic of "exposure" that was the intended, "transparent" reading practice for documentary images intended to reveal the (racialized) "naturalness" of "the hapless, the forgotten, the marginal, and unselfconscious" (69). Instead, she claims that "Ellison's text

²⁵ See, for example, Lena M. Hill, "The Visual Art of Invisible Man: Ellison's Portrait of Blackness," *American Literature* 81:4 (December 2009).

emphasizes the power of the documentary stance to evoke powerful yet ambiguous responses” that occur as the result of the overwhelming presence of “more meaning than there should have been” (69). When Blair highlights Ellison’s use of the phrase “more meaning than there should have been,” her interest in the scene seems to resonate with Moten’s embrace of nonmeaning. And yet, there is something about her reading that, to my mind, fails to recognize the political *experience*—the black radical aesthetic—that plays out in the scene.

As I understand Blair’s reading, the narrator’s encounter with the photo-text brings him into fully formed critical-political consciousness. Though the narrator himself does not close-read the photo-text, Blair is able to extrapolate a rejection of the along-the-grain meaning of photo-text and an instantaneous ideology critique that spurs the narrator to action. For her, deciphering the conventions of the visual and the revelation of a submerged hermeneutic knowledge are, in fact, the privileged political acts. Yet, if we return to the scene in the novel, we find that this is not exactly how the scene plays out. The narrator does, indeed, encounter a photo-text, but far from coming into political consciousness, he is thrown into a state of questioning, into an aesthetically-inspired confusion that resembles that of the prologue: shocked by how little “removed in time” the date on old man’s free paper is, the narrator experiences time itself as slowing or altering, opening up, just as it does in the break of the prologue. And he “look[s...] inwardly, outwardly, around a corner into the dark, far-away-and-long-ago, [at] not so much of my own memory as of remembered words, of linked verbal echoes, images, heard even when not listening at home” (Ellison 273).

This synaesthesia engendered by the photograph, and experienced as a supposedly impossible looking *at* listening and sound, gives way not to a political consciousness that the narrator can then express via oration, but to a series of events and disruptions that materially move the narrator, spinning him around. The old woman screams and returns inside to the apartment from which she's been evicted; onlookers begin to fight with the cops to let her back inside. In the moment, for the narrator, "beneath it all boiled up all the shock-absorbing phrases that I had ever learned in my life" (275). So, in the interest of absorbing shock, the narrator is led not to political action nor political resistance, but a kind of accommodationism, or worse, an insistence on the very politics of respectability that had oppressed him in novel's opening chapters: "That's not the way," he yells at those who aid the woman, "We're law abiding. We're a law-abiding people and a slow-to-anger people."

When the narrator does eventually emerge into political action and oration, it happens not through a prior coming to political consciousness enabled by a critical reading, but through an improvisation made available through his synaesthetic encounter and confusion. Not sure what is happening, not sure what he thinks, the narrator speaks without foresight which becomes precisely a kind of foresight, changing his answers and positions in response to the crowd, performing with the movement of the crowd, the surge of the crowd back into the apartment, the looming violence of the police. His speech in improvisatory response, eventually becomes not a call to abide the law, but a call to carry the dispersed belongings back into the house and a mocking of the police (279-280). The effects of the photo-text, then, weren't limited to meaning but rather engender experience and improvisation,

a way of making the world in process in response to the changing material conditions—what Moten calls “black performance”—conditions that neither ideology (critique) nor political consciousness can alone predict or instigate. A response to the logic of racist violence requires not (only) a reading of it, not (merely) an understanding of its logic, but an attunement to the sensorial that exceeds it, that can be moved on and with—a capacity to remake the world on the fly that expands rather than contracts the possibilities for resistance.

A capacity to be open to the opening that the cut makes—an attunement to the cut—also suggests another way of thinking about the experimental that Blair dismissed “in the pejorative sense.” In describing Ellison’s photographic archive, Blair notes that his use of several different kinds of camera “allowed Ellison to pursue a different relationship to the photographic subject: that of studio professional, producing author portraits; of participant-observer, recording the daily facts of Harlem life; of avant-gardist, testing the possibilities of the medium; of sympathetic outsider, witnessing the lives of the marginalized” (63). Yet, if she initially affirms his “conducting of experiments” with the camera, she affirms them primarily for their eventual effect: giving him a set of critical-interpretive tools. Speaking only of the “avant-gardist” photos, Blair makes her statement: “As a body of work, these images are scattershot and often experimental in the pejorative sense—that is, tentative or technically unrealized.”

While it is not entirely clear to me what the “non-pejorative” sense of experimental would be—something that Blair seems to think is obvious enough to go unsaid—I am assuming she is linking the valuable form to the “conceptual” strain

of avant-garde art: art that realizes a concept that both inspired and preceded it. It is useful, here, to turn to David Galenson's distinction between conceptual and experimental artists. According to Galenson, the "basic characteristic" of conceptual artists "is certainty about some aspect of their work — their method, their goals, or both. Their certainty often allows them to work methodically, according to some system, toward their goals" (51). By contrast, an experimental artist operates not from an answer, but from a question, from an uncertainty about the world that is answered not through critical thought alone, but through encounter and interaction with the material world, through experience. This distinction links the experimental artist to the valuable experimenter in science (rather than the normal scientist) I discussed in my opening chapter. The valuable experiment requires the production of thought, concepts, and description immanent to rather than preceding the experiment, all of which shape without fully determining the material under investigation. Indeed, like Ellison's narrator, who describes himself as a "thinker-tinker" (7), Ellison himself thought through the doing of photography, music, and writing.

Eschewing Barthes's bracketing of the "doing of photography," and valuing rather than dismissing the partial products of the process, can open up new ways of thinking about the politics not only of the novel, but also of Ellison himself. Moten suggests that "black photography and black performance" are privileged sites for locating and affirming the "ongoing universality of [...] absolute singularity" (PG). They engender an opening for difference rather than reducing it in the name of an essential or single universality. Yet, it seems a little difficult to posit Ellison's

photography or his writing as exemplary of this kind of aesthetic blackness—a blackness not reducible to identity—given his own commitment to nationalism and universal brotherhood, commitments to a reduction of difference in the name of the universal same (the empty liberal subject). But if you take Moten’s example, and disrupt time to affirm the political act not for its telos—not for its longevity or endpoint—but for its struggle in time, then you can see and hear Ellison a little differently.

Which is all to say, paying attention to excess and nonmeaning makes space for another kind of “critical” reading and writing practice that doesn’t operate by way of critique precisely, but rather by way of “a mimetic improvisation of and with that materiality that moves in excess of meaning.” It indicates the need for a reading method that doesn’t depend on the “isness” of literature as an interpretive totality or closed ontology, but as a collection of events, nodes, singularities that cannot be fully totalized either through form or critical interpretation. A commitment to an improvisatory, connective reading practice can open up new political possibilities, engendering effects, and entangling itself with a world that it does not *represent* but is, rather, *in*. In this practice, it is precisely the excesses, absences, cuts and folds of literature that become material nodes to link up with the world.

Realism, for this kind of reading, then, would not be a matter of mimesis. In a traditional account of literary realism, realist novels operate in ways that are quite similar to how the classical world is presumed to operate. As Ian Watt has it in his influential account, *The Rise of the Novel: Studies in Defoe, Richardson, Fielding*, the realist novel produces a “causal connection operating through time [that] replaces

the reliance of earlier narratives on disguises and coincidences” (Watt 22). For Georg Lukacs, the political aim of the social realist novel is to produce a totality from the social, of making of social interactions a comprehensible and causal system, which can then be explained, and in being explained, understood in ways that will allow political consciousness to emerge. In a sense, for Watt realism brings to the novel the scientific virtue of causality, freeing it from mystifications of pre-Enlightenment magic (and the possibilities of non-causal entanglement); for Lukacs it takes totality as its aim (despite having lost a relationship to a given totality), and uses abstract concepts to make systemic totality visible—and hence causality within that totality comprehensible (Lukacs 70). For both, the realist novel is transparently mimetic of reality while also offering aesthetic tools to make it comprehensible; the novel is an interpretive tool in the sense described earlier by Blair.

Ellison’s dilated realism brings all these assumptions and values into question, rejecting the value of a scientific interpretation of the novel as well as assumptions about knowable reality. As Ellison describes it, mimesis is the realm of the scientific total ontology, the “distorting mirror” that causes “a defect of the inner eye” of the observer; mimesis allows a model or representation to stand in for the ontological and thus closes it off (Ellison 3). Realism, instead—whether dilated or quantum physical—would have everything to do with affirming the *reality* of literature, as with that of the quantum world, as connected up with and interacting with *this* world via ontological continuity and material practices, rather than understanding literature as offering an external standpoint, an interpretive tool.

Highlighting the role of realism is important for understanding the confluences between Einstein's thinking and Ellison's. Ellison describes "dilated realism" as an alternative to realism's subgenre, naturalism's "sometimes slavish adherence to mimetic representation," its "willing[ness] to compete with the camera and the tape recorder" (Quoted in Bradley 172, 176); dilated realism, by contrast, is "a realism dilated to deal with the almost surreal state of our everyday American life" (Bradley 171). In rejecting "mimesis" as the purview of his realism, Ellison proposes a different possibility for aesthetic engagement with the real. As Adam Bradley describes it, "It is no simple matter of semantics that Ellison displaces surrealism from the realm of artistic technique to the nature of experience itself. Dilated realism as Ellison would come to understand it was not a representational choice of the artist but a state of being in a world gone topsy-turvy" (173). Ellison's desire to produce an account of the real from the standpoint of the object—a point of view not available via "slavish adherence to mimetic representation" nor the transparent readability of inscription technologies—required a realism that affirms experience over mimesis and understands writing and reading as *experiences*. The capacity to produce such a realism—especially one that *cannot* be guaranteed by technologies of vision nor recourse solely to vision—is a central concern in Einstein's search for quantum realism.

Another Realism: Unruly Perception

In a strict sense, in physics, “the abandonment of objectivity” would also be “an abandonment of realism” (Hemmick and Shakur 1). Yet what is meant by quantum realism, and how it might relate to literary realism, raises interesting questions about what precisely “objectivity” itself would mean when not linked to the *subject’s* capacity to be *objective* and therefore *know* reality, but rather, to the reality—which is to say, the existence—of objects themselves. Physicists Douglas Hemmick and Asif M. Shakur define realism for physics negatively, stating, “If, in fact, the best one can do is to discuss the *responses* of physical entities to certain measurement procedures, then quantum theory seems to imply that the reality of any physical entity is dependent upon human scrutiny. This is what is meant by a lack of realism or objectivity in the theory” (1). Einstein’s pursuit of quantum realism, then, has much in common with Ellison’s production of a dilated realism in that it aims for a description of the world that would constantly keep the irrational in play, rather than subjugating materiality and force to a full determination via observation. Their pursuit of realism extends the experience of the irrational in order to see what it can produce. The more than thirty years that Einstein would figure and refigure his thought experiments about light in a box, the almost two decades that the invisible man would spend underground in a hole filled with 1,369 light-bulbs, and the eleven years that Jackson would spend “liv[ing] in a constant half-light” in his prison cell extend the time of the irrational, keeping excess and its

possibilities open for thought—and eventually, according to the invisible man, open for action.

Importantly, in order to see the possibilities that come from both the excesses of novel writing and the excesses of science writing, it is necessary to read them against the will to totalizing closure, whether it is produced through critical assumptions about the formal implications of the novel's pro- and epilogues, or the published essays of the physicists in question. As the opening epigraph from Ellison makes clear, as do his later explications of the role of the novelist, his goal as a writer was to master what he understood as the underlying chaos of the real and to shape his material so that only those things which are significant—which is to say, those things which give way to meaning—remain. Yet, even as Ellison asserted this as his goal, and at times would publicly claim to have succeeded, his newly written introduction to the 1981 version of the novel paints a somewhat different picture of the relationship between novelist and novel. This newly described relationship calls into question the novelist's capacity to master his material and instead affirms the insistent, disruptive materiality of the world, the writing process, and the novel itself. He writes:

[For the novelist] the task of accounting for the process involved in putting [words on the page] is similar to that of commanding a smoky genie to make an orderly retreat—not simply back into the traditional bottle, but into the ribbon and keys of a by now defunct typewriter. And in this particular instance, all the more so, because from the moment of its unexpected inception this has been a most self-willed and self-generating piece of fiction. For at a time when I was struggling with a quite different narrative it announced itself in what were to become the opening words of its prologue, moved in, and proceeded to challenge my imagination for some seven years. (Ellison vii)

Here, Ellison describes the difficulty of reigning in disorderly synaptic materiality in order to produce the labor of typing, of writing (highlighting the materiality of the process), and the ways in which such a willed production of order is always countered and interrupted by the productive excesses of that labor. He cites as evidence of the self-willing and self-generating capacities of the novel his own inability to master the supposed “meaning”—or reign in the excesses of meaning—that it continues to generate: “[T]he proof of that statement,” he writes, “is witnessed by the fact that here, thirty astounding years later, it has me writing about it again” (xxiii).

Taken at his word, Ellison evinces the extraordinary capacity for surprise that characterizes experimental “science at its best” (Doyle 105)—and perhaps experimental literature at its best: when it is attuned to the *unknowable* and therefore *unpredictable* potentialities of life and literature. It also suggests an invitation to read Ellison’s novel, from Ellison himself, *with* and through its excesses and absences (absences as excesses, pulsing absences, ghostly hauntings), even for its seeming impossibilities. Despite Ellison’s claims to mastery and to the meaningful totality of his narrative, several critics have taken up just such an invitation—among them Moten and Bradley—seeking not so much to produce “meaning” from the novel, as to expand its possibilities beyond meaning precisely on the grounds of excess, absence, and presumed impossibility. For Moten, this possibility is most apparent in Ellison’s prologue, in which all the invisible man’s inquiries into the promises and violence of vision are cut by hearing. In the

revelation of such interrelation between sight and sound, aesthetic experience comes to have a new and expanded valence for the narrator, one that opens up the possibility for a political action to emerge from and as aesthetic experience (Moten 62). For Bradley, it is most apparent in Ellison's *process* of writing, which remains evident in and through the open multiplicity of Ellison's unfinished, forever unfinished, second novel. The second novel, *Three Days before the Shooting*. . . remains a series of drafts with multiple versions of the same scene coexisting and simultaneously functioning in the open novel: it endures as a multiple is-ness and ontological coexistence of what (might have) occurred.²⁶

In *Ralph Ellison in Progress: From Invisible Man to Three Days Before the Shooting*. . . , Adam Bradley reads Ellison's writing-life backwards, beginning with his death in 1994, and working his way back through the forty-years that Ellison spent struggling, writing, and re-writing a novel always in-process that he'd hoped would be the follow-up to *Invisible Man*. Bradley's major innovation is to "read" the unfinished novel not in its most complete or unified form, but as it existed in multiple and disconnected, episodic drafts. He presents it as necessarily indeterminate with multiple versions of the same scene or even multiple plots existing simultaneously. In doing so, he keeps the second novel linked to *Invisible Man*, as early drafts drew on characters from the first novel, and in that sense, allow it, too, to be re-opened and read as an on-going revision. He notes that one major

²⁶ Ellison's second novel was published posthumously in partial form (a single, long, mostly completed section) as *Juneteenth*. Recently, Bradley and John F. Callahan have published a more expansive version under the title *Three Days before the Shooting*. . . .

inhibition to the completion of Ellison's second novel was that he liked to work episodically, yet his ambition was to write a novel capable of producing an "aura of summing up the American experience" (Bradley 12-13). Ellison felt that for all his work he was "routinely thwarted by the passage of time which would render his best efforts to capture the historical moment insufficient once the moment had passed" (17). He wanted to transform history and literary tradition into a suitable vehicle for navigating these kinds of temporal obstacles, to "achieve a liberated form that better accounts for the varieties of lived experience" (97). Each episode or scene was being constantly augmented to speak to politics, and especially racial politics, as they were changing on the ground from 1952 to 1994. The need for constant improvisation made writing the "seams" that could link the episodes and totalize the novel virtually impossible. For Ellison, it was almost as though these scenes were "cut" from one another, and he couldn't figure out how to bridge the "cut," even as he struggled to, constantly working in the break.

The episodes in their indeterminacy give a way of tracing Ellison's artistic struggles—and for Ellison, "art is a form of political action" (95)—and help to disrupt the caricature that now characterizes his political reputation. Episodes that were removed from the *Invisible Man* or still in progress in the *Three Days* show that Ellison had a much deeper and more conflicted engagement with questions of nationalism, the war in Vietnam, Pan-African solidarity, women, and individualism than characterize his reputation today. But even as the ground was always changing underneath him, he kept returning to artistic praxis—a praxis that limned writing,

photography, and music, all of which informed each other—to generate his questions.

Reading Ellison in this way, through his own self-evaluation and invitations to see or hear—to experience—these excesses, gives a new, or perhaps more precise, valence to the myriad claims that *Invisible Man* is an “experimental novel.” Ellison’s suggestion that what the novelist as self-critic does is “account for the process involved” in the double mediations of the world via thought and thought via writing (in which both processes are cut by the materiality and worldliness of their own labor) brings him quite close to the efforts of sociologists of science Bruno Latour and Steve Woolgar in *Laboratory Life: The Construction of Scientific Facts* to account for the practices, erasures, and excesses to be found in science writing that reports on experiments. Latour’s and Woolgar’s ethnography of laboratory life focuses on a particular biology laboratory, yet they turn to an example drawn from astrophysics—a field that relies heavily on quantum theory—to make most clearly their point about the ways in which valuable experiments (“science at its best”) come from the extraordinary capacity for surprise, the capacity not merely to see, but to *hear* what is beyond the meaningful. They write:

Sometime in late 1967, Jocelyn Bell, a research student at Cambridge radio astronomy laboratories, noted the persistent appearance of a strange section of ‘scruff’ on the recorded output from [an] apparatus designed to produce a sky survey of quasars. [. . .] In this particular example, it might be argued that if scrutiny of the recording had been automated, or if Bell had been sufficiently socialized into realizing that the persistent recurrence of scruff was impossible, and hence unnoticeable, the discovery of pulsars would have been much longer in coming. (32)

As Latour and Woolgar imply, Bell made the observation of “a bit of scruff” against the given scientific impossibility of that scruff, against the technical and theoretical imperceptibility of an invisible pulsar. The special and protective conditions of the lab allowed the emergence of an improper perception that would have profound implications for our understanding of matter, and the conditions that enabled such perception begin to speak back to Ellison’s own understanding of what it would mean to be “in the break,” to be held in time in order to engender the improper miscegenation’s of sensory perception that are the condition of possibility for his experiment with aesthetico-politics.

But rather than simply affirm the ways in which unruly perception and thought are bound up with the experiment and experimental conditions—that is, the ways in which *experience* is experiment—Latour and Woolgar continue by analyzing the ways in which such unruliness is ordered for the purposes of knowledge production. They highlight how scientific publishing practices privilege to the production of meaning over the experience of the experiment, and thus how they have to track backwards to understand how such perception even became possible:

Technical events, such as Bell’s observations, are thus much more than mere psychological operations; the very act of perception is constituted by prevalent social forces. Our interest, however, would be in the details of the observation process. In particular, we should like to know the method by which Bell made sense of a series of figures such that she could produce the account: “There was a recurrence of a bit of scruff.” The processes which inform the initial perception can be dealt with psychologically. However, our interest would be with the use of socially acceptable procedures for constructing an ordered account out of the apparent chaos of perceptions.” (33)

The scientist's task mirrors that of Ellison's: producing order (which is to say, meaning) out of chaos. This means eliminating the virtual multiplicity that always undergirds experience in order to actualize a particular meaning, altering description into explanation. They continue, "The observer has to base his analysis on shifting ground. He is faced with the task of producing an ordered version of observations and utterances when each of his readings of observations and utterances can be counterbalanced with an alternative." Physical experiments, then, contend with the problem of *presumed* order, which retrospectively places limits on the description of experience (or makes a meaning visible while reducing the rest). The thought experiment, in questioning the presumption of order as immanent to life and the material world, can reopen the field of experience to new descriptive possibilities. This also opens up a thinking of aesthetic determinations and reductions as that which is the producer of order and form, but also that of sense experience beyond and before it, constantly altering aesthetic productions: aesthetics as on an improvisatory process.

Deleuze clarifies what this would mean for art. In *The Logic of Sense* he writes:

Aesthetics suffers from a wrenching duality. On one hand, it designates the theory of sensibility as the form of possible experience; on the other, it designates the theory of art as the *reflection* of real experience. For these two meanings to be tied together, the conditions of experience in general must become conditions of real experience; in this case, the work of art would appear as experimentation. (260)

It is via the linking of sensorial experience as perception and the doubling of that experience in the perception of art that art is experimental. Art is a *reflection* of experience in that it is a repetition of experience, but instantiated as a *particular* and real experience—an experiment with experience itself. By manifesting sensibility, which is “the condition[] of experience in general” as the “condition[] of [a] real experience” had in an encounter with the novel through reading, Ellison does not *represent* experience but repeats it, doubles it, in dilated form, making it experiment.

An Improperly Scientific Standpoint

A reading practice that would attune itself to literature as the condition of real experience, and which would read it “by mov[ing] in the excess of meaning” (Moten, *Break* 197), would not encounter literature as a total object or closed ontology, but as a collection of events, nodes, and singularities that cannot be fully totalized either through its own formal conventions or critical interpretation. With regards to Ellison’s novel, reading in this way can open up new political possibilities not just for the meaning of the novel, but also for engendering effects and entangling the novel with a world that it does not *represent* but rather is *in*. In this practice, the excesses, absences, cuts, and folds of literature become material nodes for linking literature *to* the world, and criticism becomes one mode of producing these links. Reading dilated realism, then, would not be a matter of interpreting representations, and certainly not as though representations mapped a referent thus closing off ontology or totalizing it. Dilated or quantum realism, instead, affirms the reality of

literature and the doing of physics as connected up with and interacting with this world.

It is in this sense that an *improperly* scientific standpoint—one that, like Jocelyn Bell, is not properly conditioned either for making meaning out of observation or encountering reading as a hermeneutic enterprise—becomes a vital contribution of Einstein's, Ellison's, and Jackson's work. This improper scientific standpoint is both produced *within* and *from* their work in connection with experience beyond it. This open standpoint that emerges from the irrational within and across literature and the world could be described as an experimental standpoint in the sense of the valuable experiment: it is an experiment that allows new values can emerge. Understanding these works as producing an experimental standpoint helps to explain the ways in which they disrupt an idea of politics that would understand causality and knowledge of that causal history as determining political possibility. This improperly scientific standpoint is what I have earlier described as the standpoint of the object.

Beginning not with knowledge about the world, but belief in it—in its *objective reality* beyond the *knowability* of such reality—enables thought that affirms the *experience* of the object beyond knowledge of such experience, and which therefore implies the possibility of unseen realities: other worlds, both virtual and actualized, in this world. And it does so by thought experiments that isolate the object for investigation—whether in the light box, the invisible man's hole, or Jackson's cell—in order to describe such experience, not as given fact, but as ontological reality that engenders new possibilities. Thought experiments then

become technologies of vision in the most material sense—shaping both the materiality of perception and engendering and expanding its potential effects—not merely by offering up new forms of vision, but by experimenting with the possibility of the invisible real, of feeling and responding to invisible, impossible effects. In this way, thought experiments are not merely experiments conducted *through* thought, but experiments *with* thought and its possibilities, engendering both new, amorphous perceptions (perceptions of material possibility *as* reality) and also new values that such perceptions enable and require. It also highlights the *materiality* of thought as inextricable from its embodiment and effects—thought itself as material. We might call this material thought *black thought* in opposition to a dualism that conceives of *Enlightenment* (which is to say, light, white) thought as disembodied, a product of a Cartesian split.

The radical science that Einstein, Ellison, and Jackson develop, then, is both radical in its complete revision of scientific or perceptive values, but also in its being imbued thoroughly by the materiality of politics that a historical division of science (and the investigation of the material) from “interest” (thought-as-desire) would deny. It is a thoroughly interested science, grounded in an affirmation of belief—belief in the world—and in the possibilities of black radicalism that could understand the links between aesthetics, science, and politics; links made apparent when any theory/system isn’t seen as total, but rather traversed by the irrational. And any failure to fully resolve or “solve” a systemic problem by *completing* the system(ic understanding)—a failure experienced by both Einstein and Ellison—must be seen not as political failure, but rather, as a political possibility that is

grounded in that irrational that traverses the systematized, the rational. Such failures point not to an incommensurability between ontology and epistemology, but to an ontological quality, a being that is open, multiply determined, and infinitely available for actualization.

This question of a different scientific-cum-political standpoint—the standpoint of the object—becomes especially clear if we oppose it to an ideological standpoint, one in which, according to Louis Althusser, the real relations of production are obscured by a representational imaginary enabled by the capitalist state.²⁷ In Althusser's account, a *revolutionary* or experimental standpoint becomes impossible because ideology is total, and any position taken against it is always already duped, always implicated in ideology itself.²⁸ A long history of materialist thinking, however, has struggled with the question of the standpoint from which one might see the fact of the unseeable that could extricate one from the grips of ideology. This question of standpoint has, within a Marxist historiography, sometimes appeared as a desire for a properly scientific position, one that could be opposed to ideology and enable a revolutionary position.²⁹ Science itself is

²⁷ See: Louis Althusser, "Ideology and Ideological State Apparatuses: Notes Towards an Investigation," in *Lenin and Philosophy and Other Essays* (Monthly Review Press, 1971); accessed from <http://www.marxists.org/reference/archive/althusser/1970/ideology.htm> (March 10, 2012).

²⁸ See: Michelle Koerner, "Lines of Escape: Gilles Deleuze's Encounter with George Jackson," *Genre* 44:2 (2011): 157-180 for a more thorough account of some of the implications of Althusser's position for the possibility of a revolutionary standpoint, especially with regards to Jackson.

²⁹ See, for example: Nancy Hartsock, "The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism" (1983) in *Discovering Reality: Perspectives on Epistemology, Metaphysics, Methodology, and Philosophy of*

ideological, however, when it uses vision to totalize the world and claims a determinate ontology limited to positivist knowledge. But what if the “objects” of science might have agency not by becoming subjects who “master” knowledge of ontology and therefore master the world historical, but rather by interacting with the unknowable, by assuming their object position in play with the *unknowable* reality of the world.

We might understand Ellison’s novel, then, as a search for this improperly scientific standpoint, a position that would not be an objective *outside*, but would rather be the position of the object as an internal outside, an unknowable opacity within. This possibility becomes especially clear if we take seriously the ways in which the Brotherhood’s economic science is understood as an ideology that, against its professed materialism, obscures not only the real relations of production, but also the social relations with and beyond material relations. Critic Barbara Foley has made much of the fact that the most prominent and vicious “scientist” in the violent penultimate scene of *Invisible Man* is Brother Jack, the promulgator of “communist science.” Foley reads the Brotherhood as a representation the Communist Party USA, and the novel’s portrayal of it as an indictment of the Communist Party’s racial politics. Foley’s point has some salience: the Communist Party in the US had a more nuanced relationship to race than one would perceive if one were to read Ellison’s description as a form of historical fidelity. Yet, reading Ellison’s novel as an attempt at historical mimesis misses much of what becomes

Science, Eds. Sandra Harding and Merrill B. Hintikka (New York, NY: Kluwer Academic Publishers, 2004)

possible if one looks at the kind of historical determinism invoked by the fictional brotherhood and at how that comes to relate to larger questions of scientism or scientific logic.

The Brotherhood understands their dialectical-materialist epistemology (which is to say, their ideology) as coextensive with ontology: science is mimetic of ontology and ontology is historically determined. Political action for the Brotherhood means inculcation in this particular view of historical determinism, and political action is limited to an unveiling of false consciousness and a bringing to “proper” (ideological) consciousness of the people. The invisible man begins to realize that such ideological indoctrination is often happening at the expense (quite literally, with regards to monetary donations, and also donations of labor-time to the party) of the people it is supposed to help—and, indeed, it eventually leads to the death of the black Brother Tod Clifton, who has been a totem for the Brotherhood.

Thrown into a state of confusion and political despair after Clifton’s death, the invisible man asks: “At what point do we stop?” Hambro (a leader of the Brotherhood) responds, “At the proper moment, science will stop us” (Ellison 505). Science, then, appears as the total condition of possibility for ontology in such a formulation, and there is no possibility for an outside to its ideology. By describing the its ideology as a “science” and aspiring to scientific determinism, the Brotherhood limits political action to merely being scientific; “the brotherhood had both science and history under control” (381). It is his doubt about the particular determination the Brotherhood has outlined that leads the narrator to ask, “What if

history was a gambler instead of a force in a laboratory experiment?" (441). What if there might be a history that bet against statistics, probability, and knowledge, and profited from doing so, rather than being determined by them? This thought leads the invisible man to wonder what it might mean, what might become possible, if one were to "plunge out of history," to leave behind "the futile game of 'making history'" all together (447, 575).

The Outside of History: Love and the Not Yet

Invisible Man's invention of a mechanism to for getting "outside" of history helps to explain the liberatory potentials of the past and future that continually irrupt into the invisible man's present against his will (499). Critic Timothy Murphy cites the famous scene in which the invisible man's desire to eat a roasted yam on the street cuts against his desire for propriety, arguing that the experience and pleasure of eating links him to an agrarian past from which he has been running and giving him his first taste of freedom. Murphy's reading casts doubt on claims that the novel advocates a politics premised on the "bringing to modernity" of black people. Interestingly, those critics interested in Ellison's relationship to psychiatry and his affiliation with LaFargue have been especially invested in claiming modernity as the determining force of the novel. J. Bradford Campbell, for example, argues that the novel evinces black people's potential to be neurotic, which psychiatry has denied by assuming that blacks were not affected by modernity. Yet, Campbell's reading understands "modernity" as a fixed and inescapable historical end to a problematic

but real historical progression, a progress narrative that black people can now be a part of, no longer relegated to the primitive (Campbell 460). Ellison's exploration of "plung[ing] out of history" as a condition for engendering political action seems to suggest that the novel is not invested in this kind of progress or "bringing to modernity." Instead, it has more in common with the dangerous edge that quantum physical entanglement treads, cutting close to and circling back to a kind of pre-Enlightenment magic, to non-causal connectivity that traverses supposedly linear and progressive understandings of time: cutting close and circling back to what George Jackson later described as "the mind of the primitive commune that exists in all blacks" (Jackson 4).

Such entanglement appears as the impossibly sensible, the sensation and sensorial experience, aesthesis, which emerges and communicates beyond and in excess of historical knowledge as a kind of impossible *aesthetic experience* of the past, linking Ellison to Jackson. The invisible man abandons the false pursuit of propriety and instead critiques the proper (which is, according to Moten, to participate in a black radical tradition) *through* the sensorial irruption of the pleasure of taste that links him to a past before and beyond him.³⁰ Similarly, for Jackson, the past irrupts through *feeling* and a *doubling of experience* that constitutes the aesthetic as experiment. In a particularly poetic passage of one of his letters, Jackson writes:

My recall is nearly perfect, time has faded nothing. I recall the very first kidnap. I've lived through the passage, died on the passage, lain in

³⁰ Moten states that radicalism, and especially black radicalism, is best understood as "the performance of a general critique of the proper" (Moten "Case" 177).

the unmarked, shallow graves of the millions who fertilized the Amerikan soil with their corpses; cotton and corn growing out of my chest, "unto the third and fourth generation," the tenth, the hundredth. My mind ranges back and forth through the uncounted generations, and I feel all that they ever felt, but double. I can't help it; there are too many things to remind me of the 23½ hours that I'm in this cell. Not ten minutes pass without a reminder. (Jackson 233)

Here, it is the impossible *feeling* or *experience* of history—cotton and corn growing through his chest—that links Jackson to such a past, that doubles his experience of prison conditions into a feeling that collapses the temporal gap between him and those who lived and died on the passage. It enables him to understand his intervention in history as a return, a disruption of a progressive causality, that makes a way out. The “primitive commune” Jackson invokes in the opening epigraph is not a relic of the past; it is a community that continues to exist in the minds and bodies of black diasporic experience that continually encounters historical repetition.

Jackson spent almost a decade of his life in the company of only books and letters. What reading became for him, then, was quite different than a critical sensibility in which *critique* is itself a political end. Instead, this way of doubling history while tearing it from its context—tearing the third and fourth generations from both the Biblical exodus and the Middle Passage simultaneously—to make use of it in his own moment, to experiment with it in the now, produces a reading practice that is also a writing practice, and something akin to a *use* of literature,

which Deleuze describes as “reading with love.”³¹ Deleuze suggests that a more conventional method of critical reading would entail “looking [for] signifiers” (Deleuze *Negotiations* 9). He rejects that hermeneutic practice for an “intensive” mode of reading. This second mode, he says,

relates a book directly to what’s Outside. A book is one flow among others, with no special place in relation to the others, that comes into relations of current, countercurrent, and eddy with other flows—flows of shit, sperm, words, action, eroticism, money, politics, and so on. [...] This intensive way of reading, in contact with what’s outside the book, as a flow meeting other flows, one machine among others, as a series of experiments for each reader in the midst of events that have nothing to do with books, as tearing the book into pieces, getting it to interact with other things, absolutely anything, is reading with love. (Deleuze *Negotiations* 9)

Love, as the underlying impetus of this reading practice, names a violent force of possibility that takes on a decidedly political valence, linking those things divided and separated by disciplinary practice (literature from economics from erotics, etc.); it names a method for *entangling* and revealing *entanglement*. Jackson would continually mobilize love not just as a method of connecting literature to life but also as a means of making political connections and communities beyond the capacities granted to him by the state, allowing him to actualize the politics that continually irrupted as possibility for Ellison.

For Ellison, *love* was a mysterious force whose potential he could not quite grasp, but which he imagined could be something with and in excess of individual love: as a radical politics. After the death of Clifton, the invisible man wonders,

³¹ The line, “unto the third and fourth generation,” that Jackson cites is taken from *Exodus* 20:5. See: *The Holy Bible, New International Version* (Grand Rapids, MI: Zondervan, 1989): 68.

“could politics ever be an expression of love?” (452). But even to the novel’s end, he remains incapable of harnessing such a force, and he is thrown into a kind of reactive violence. The prologue of the novel contains, with the exception of the pre-epilogue fantasy, some of the strongest accounts of the invisible man’s anger and violence: invisible, he is finally free to be improper and experience anger about his particular structural position and the ideologies that, under the guise of liberation, have consistently reinscribed his oppression. However, Sara Ahmed, drawing on Audre Lorde’s account of the Combahee River Collective and Lorde’s feelings of anger about racism, offers a different way of comprehending the invisible man’s anger. Rather than understanding anger as a reactionary force of negation, Ahmed writes:

Here, [for Lorde] anger is constructed in different ways: as a response to the injustice of racism; as a vision of the future; as a translation of pain into knowledge; as being ‘loaded with information and energy’. Crucially, anger is not simply defined in relation to a past but as opening up the future. In other words, being against something does not end with ‘what one is against’ (it does not become ‘stuck’ on the object of either the emotion or the critique, though that object remains sticky and compelling). Being against something is also being for something that has yet to be articulated or is not yet. (Ahmed 248)

The invisible man’s retreat to the hole and his unchecked rage in the prologue have long been read as the abandonment of political possibility, but by taking Ahmed’s and Lorde’s revision of anger we are given a way to understand the inventive possibility and political engagement that the invisible man experiences: to be against a history of racist science and its material effects is also to maintain a

relationship to political futurity. The invisible man's anger and rage can then be understood as "being for something that has yet to be articulated or is not yet."

Anger that is also a becoming "for" the not yet disorganizes the relationship, both conceptually and practically, between what is and what can be. In the final lines of the novel, the strange and dream-like perceptions that pervade the invisible man's experience of the hole produce the possibility of a new and different plan for living, a plan for living that can only be accessed by abandoning the historical narrative of modernization and progress, and returning to the conceptual and ontological priority of a chaos on which to build new forms of organization. He concludes the epilogue, stating:

The mind that has conceived a plan of living must never lose sight of the chaos against which that pattern was conceived. That goes for societies as well as for individuals. Thus, having tried to give pattern to the chaos which lives within the pattern of your certainties, I must come out. I must emerge. (Ellison 580)

This complicated formulation acknowledges that within the patterns of certainty—perhaps especially the certainty of scientific knowledge—there resides chaos, irrationality. The narrator's goal is to make a new pattern, a life, on and with such chaos. His attempt to pattern chaos results in an emergence filled with the political charge of a plan for living that is not so much a new ideology, a new governing epistemology, as it is a plan to *live* itself, a plan to construct new forms of organization that are yet to be known, but that can respond to the irruptive material conditions that have conditioned him.

In the final line the narrator begins to imagine producing a community of his own. Responding to a question that has animated the final searching of the novel—“Can politics ever be an expression of love?”—he says finally, “Who knows but that, on the lower frequencies, I speak for you?” Here, rather than reading “speaking for” as a standing in place of, or speaking on behalf of, the seeking and yearning of the narrator, his hope for a “plan for living” that will lead him out of the hole, seems not to indicate an authoritative “speaking for” so much as a speaking to, speaking for as a gift to be received and reciprocated, to be spoken back to. And it is this transmission, on the lower frequencies, that finds the novel engaged with and animating a strain of black radical thought that will extend the line of materio-philosophical thought-action, of thinking-tinkering, into particular activist struggles—struggles that mirror and extend the invisible man’s own struggles and potentials developed in “the hole.” Beyond not merely physical space-time separation, but also juridically imposed space-time separation, Ellison and his narrator make possible an unacknowledged community with Jackson.

The desire to make a radical and resistant community, a community that could *plan to live* against imposed and systematic plans for life, was central to Jackson’s own writing. Unlike Ellison, however, who in writing *Invisible Man* was limited by his attempts to master what it would mean to be a proper novelist, Jackson struggled against prison conditions that limited his capacity to write at all. Ellison felt that one had to narrow experience and produce coherence out of chaos; Jackson, by contrast, had to produce excess that could communicate above and beyond his writing. As the editor of *Soledad Brother* comments in a footnote: “All of

Jackson's correspondence had to pass through the rigors of prison censorship. Much of it was completely destroyed or mutilated. Only his last letters to his lawyer passed through uncensored" (Jackson 57). In addition to the restraints imposed on his communication with the world outside the prison, his access to books was limited to particular sizes and editions approved by the prison, which he relied on those outside to send him and which were often difficult to get.

Jackson was intensely aware, and often angry—angry in ways that pulsed with a desire for the not yet—that his access to knowledge about the world was hampered by both the prison system that contained him and a failed and misguided educational system that preceded it. He recognized that the dominant epistemologies that governed the systems constraining him were constituted through the elision of black life and black thought; their absence was its condition of possibility. But he also understood that full knowledge, in or out of the prison, was impossible—the world would always exceed any attempts at total rationalization. Any given ontology, founded on the possibility of epistemologically totalizing being in the world, would be, in Moten's phrasing, "inadequate to blackness" (Moten "Case" 187). Jackson therefore has to invent a relationship to the world beyond ontology itself, a relationship that improvises its own relations on the fly, in ways that affirm and make use of the excesses that emerge most significantly in the prison's attempts to suppress them.

Jackson's attempts to produce a community of being through his correspondence had to operate at levels quite different from that of information transfer or signification. He often feared, rightly, that his letters had not gotten

through. He therefore expressed things indirectly, often punctuating his letters with “you dig?” Given the necessary opacity of his letters, the phrase seems to indicate something more than a colloquial query about understanding; it indicates a materiality that had to be dug into beyond what he could write “directly” (Jackson 57). For him, the ways in which his letters were cut out and censored is another means of enforcing divisions that hamper the political potentials of love. He writes:

It is terrible that we have all been so divided. The social order is set up so as to encourage this. The powers that be don’t want any loyal loving groups forming up. So they discourage it in subtle ways. And as it is said, when poverty comes in the door, love leaves by the window! (Jackson 151)

The barricades produced by poverty, while seemingly metaphorical, are as real for Jackson as the prison walls; division is a real social and ontological effect of an always material epistemology. For Jackson, the prison operates means of guaranteeing a national community of proper citizen-subjects through the eradication of that which is irrational to and in excess of it. More forcefully, it is a means to eradicate alternative social formations, any actually existing *loving* groups that might form out of shared interest and need, groups whose composition was another name for black life. The prison is but a last, stopgap measure for enforcing the divisions already formed by economic inequality, racialization, and (as he comes to realize in his final letters to Angela Davis) hierarchical gendering.

But Jackson understood love as a force that, despite being under attack, was not only necessary but also resilient, immanently produced in the autonomous formation of shared communities—whether they be communities of any two people

with similar struggles or communities of global millions across the third world. So, though he would speak of love under attack, it would also be in speaking of love, and the possibilities of love—love that needs to be dug into—that he could articulate his own improvisational politics that did not depend on a given ontology or originate with systematic organization (though it might try to form it). In fact, we might say that he articulates a science that abandons ontology all together, which makes a space for what Moten earlier called “the possibility and project of a utopian politics outside ontology” (Moten, *Break* 197). Although Einstein and Ellison both sought an epistemology that might be open to the invisible and irrational that traverses the systematization of objects, systemized and given coherence out of chaos, Jackson’s concept of political reality evinces an understanding of materiality that is itself always in formation and deformation; in which a system itself cannot even be thought as given.

Indeed, even as his writing attends to the contributions of systemic critiques of US governance and capitalism that inform his thought—especially those provided by Marxism—he rejects historical determinism in favor of undetermined production on ever-changing and unanticipatable grounds. He writes:

My life is so disrupted, so precarious, my inclinations so oriented to struggle that anyone who would love me would have to be bold indeed—or out of their head. But if you’re saying what I think you are saying, I like it. (If I have flattered myself please try to understand.) I like the way you say it also; over the next few months we’ll discuss the related problems. By the time I’ve solved these minor ones that temporarily limit my movements, we’ll have also settled whether or not it is selfish for us to seek gratification by reaching and touching and holding, does the building of a bed precede the love act itself? Or can we ‘do it in the road’ until the people’s army has satisfied our

territory problem? That is important to me, whether or not you are willing to 'do it in the road.' You dig... (Jackson 272)

For Jackson, the prison is a “minor” problem that “temporarily limit[s]” his movement. The prison is not a fully planned system at all, but an ad hoc response to the constant emergence of life; the prison’s capacities are temporary in that it is simply trying to plug the holes of a leaking, constantly constructing system. The difference between an epistemology that would see society and the world as “systems” or as something else marks a difference that also concerned Deleuze, which he articulated by posing his understanding in apposition to Foucault’s:

Michel [Foucault] was always amazed by the fact that despite all their underhandedness and their hypocrisy, we can still manage to resist. On the contrary, I am amazed by the fact that everything is leaking, and the government manages to plug the leaks. In a sense, Michel and I addressed the same problem from opposite ends. . . . For me society is a fluid—or even worse, a gas. For Michel it was an architecture. (Deleuze, “Intellectual” 21).

Jackson’s vision of the prison as an ad hoc construction of barricades resonates with Deleuze’s description of plugging leaks. This is precisely what would be revealed if science turned its inquiry to the system itself as Jackson demanded: it is not a system but a reaction to irrationality, a delirium, desperately trying to prevent the formation of a society rather than maintain the social order.

Jackson’s interest then is in not only the possibility for but also the necessity of action—the act of love—that would precede the establishment of “proper” conditions for it. To “do it in the road” would be to act in the improper place: in the “road” that has been constructed for traffic and transport, not for “love.” But more to

the point, it eradicates any sense of propriety by suggesting that *the act of love* will *produce the territory*. The act composes materiality. In a mix of literary, scientific, and political writing, Jackson develops a mode of composition that evinces the ways in which literature, science, and politics all operate to compose chaos through forces, at least one of which is love, forming and deforming against the supposed imaginary of a system, total or not. The understanding of politics he evinces here is one that both affirms a larger and directed struggle against what consistently appears as a system; but more forcefully, it also operates and acts on the materiality that is prior to such a struggle. Action that waits for the proper time to confront a systemic totality is a false hope, and could likely never be enacted at all.

Immediately following that passage in the letter, Jackson continues, emphasizing the excessive historical and physical capacities of the force of love: the capacity of love to disrupt historical and physical determinations and the very concept of ontological determination. He writes:

I'll love you till the wings fly off at least, perhaps beyond. My love could burn you, however, it runs hot and I have nearly half a millennium stored up. Mine is a perfect love, soft to the touch but so hot, hard, and dense at its center that its weight will soon offset this planet. (272)

Here, love becomes a dense physical force, a way of describing a productive desire and its potential to *offset the planet*. It has a capacity—an unsettling and unruly reality—that can disrupt ontology itself with physical and political consequences that exceed even Ellison's greatest hopes for it.

Love names the excessive force of composition beyond both epistemology and ontology, which has been carrying, above and beyond his letters, the connective tissue the prison sought to sever. That is, for Jackson, love names the very force generated and made invisible in that anoriginal entanglement, the force that continues, impossibly, to connect those who have been dispersed and divided in the scattering of the black diaspora as they continue to constitute themselves, constantly forming and reforming. And it is this love—this violent, caring, connecting force—that makes his letters something far in excess of—more politically powerful, aesthetically inventive, and scientifically vital—than information transmission that we might call knowledge or meaning (transmission that would be governed by the physical and juridical limits of space-time separation). Through the excessive materiality of his letters and of writing itself, Jackson produces the community he has imagined, the community otherwise denied to him by the epistemology that founds the prison as a necessary and dividing force and instantiates it as an ontological reality. For Jackson, thought itself becomes a physical experiment. And, in the midst of physically- and juridically-imposed space-time separation from Einstein and Ellison, he forges a seemingly impossible connection with them, too, by actualizing the real possibilities of the generative dissolution of ontology immanent to the open ontology they sought to make.

4. Minor Empiricism: The Revolutionary Time of Carson McCullers, Margaret Mead and the Combahee River Collective

*"Chaos is defined not so much by its disorder as by the infinite speed with which every form taking shape in it vanishes. [...] In the case of science it is like a freeze-frame. It is a fantastic slowing down, and it is by slowing down that matter, as well as the scientific thought able to penetrate it with propositions, is actualized. [...] To slow down is to set a limit in chaos to which all speeds are subject. [...] Science is haunted not by its own unity but by the plane of reference constituted by all the limits or borders through which it confronts chaos."*¹

*"To 'replace knowledge with belief' is the great achievement of empiricism. [...] To] undermine all principles of knowledge, all foundations, all values, one must understand thought itself as an act of belief, an experiment, a force to create new values."*²

This chapter is an attempt to trace a discontinuous and irruptive genealogy of the study of interlocking oppression under conditions of interlocking oppression. This alternative account simultaneously supplements and cuts against a history of black feminist thought that would see the Combahee River Collective's claim that their "particular task" was to develop an "integrated analysis and practice based upon the fact that the major systems of oppression are interlocking" (1977) as culminating in the sociological analytic method of "intersectionality" articulated by Kimberle Crenshaw and Patricia Hill Collins over a decade later (Combahee 13).³

¹ Deleuze and Guattari, *Philosophy*: 118-119.

² Deleuze, *Empiricism* xx.

³ See: Kimberle Crenshaw, "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics," in *University of Chicago Legal Forum* (1989); and Patricia Hill Collins, *Black Feminist Thought: Knowledge, Consciousness and the Politics of Empowerment* (New York, NY: Routledge, 2000 (1990)).

One limit of this more commonly accepted history is that it tends to valorize, implicitly and unconsciously, an understanding of “scientific” analysis and practice that is arguably in conflict with the most interesting aspects of intersectionality. Although “intersectionality” does not necessarily imply an intensification of and microtaxonomization of identity (and is not essentialist), its utility within a sociological context—which is to say, for the purposes of empirically-based analysis—has frequently operated to still and solidify identity at the margins, finding those who have been multiply identified (and consequently pathologized) bearing the burden of idealized maximal oppression. This maximal site is often located in and on the bodies of those, who, like the members of Combahee, identify as black, woman, and lesbian. Although intersectionality highlights the differential experience of interlocking oppressions, the emphasis on analytic method or interpretive framework as a means to produce and evaluate empirical research is implicated in a specifically twentieth-century valuation of a “scientific approach,” which in turn erases something of the value of the experience of producing the analytic evinced by Combahee and of an understanding of “study” as an ongoing means for producing new and changing modes of thought in response to specific conditions.

While not discounting the important work that has been enabled as a function of the development of “intersectionality,” in this chapter I suggest that we might trace a different trajectory that focuses on the more amorphous concept of “study” as a mode of inquiry in order to magnify a very different and important intervention Combahee makes possible against empirical positivism and its

practices and technologies of oppression. Drawing on Hortense Spillers's insight that twentieth century indictments of black women are grounded in the imbrication of science, law, and economy which operates to still what she describes as the time and flesh of experience, I suggest that we can expand the value of Combahee's Statement beyond the production of a counter-method. The Combahee Statement is evidence of a counter-method, but one that evinces an understanding of science as field of multiple methods and political investments that can both be countered on its own level through strategic counter-practices, but also, and perhaps more importantly, through the immanent study of experience and how experience is perceived. I call this alternative practice of liberatory knowledge production "minor empiricism." This practice wrests empiricism from the grips of twentieth-century positivism and returns to it the productive force of belief that grounded its earlier manifestations. It does so by rejecting the value of stilled and progressive or incremental time for reformist knowledge and instead inhabits the immanent duration of experience and its study as the production of a social alternative. I call this reconfigured time "revolutionary time."

This different practice of study highlights the interrelations among aesthetic determinations (or sensorial-temporal arrangements), scientific authority, and political possibility. In order to put into relief this alternative understanding of Combahee's Statement and its intervention, I put Combahee into conversation with a literary writer, Carson McCullers, and a scientist, Margaret Mead—both of whom were deeply concerned with the question of how to understand divided or interlocking oppression. This constellation of authors allows us to trace a set of

alternative practices that have struggled against the stillings of a dominant and positivist science throughout the twentieth century through the aesthetic disruption and rearrangement of organizations of knowledge, turning the force of microtaxonomizations of identity that result in an idealized site of maximal oppression against themselves. Instead, they embody the ongoing potentials of the “minor,” not as a denigrated category of identity, but as a differential mode of thought and/as experience from which to produce alternative, experimental knowledges and practices. Mead offers a way of thinking this alternative as itself scientific, while McCullers’s offers a mode of aesthetic practice that can inhabit the experience to which Mead and Combahee allude; Combahee then demonstrates the intimate linkages between these elements, reflecting and magnifying the often erased subversive political implications of both Mead and McCullers. The mutating forms of minor empiricism that make up this alternative genealogy struggle continuously and strategically against oppressive forces, while being immanently successful in their collective constitution through study.

The Times of Empiricisms

In the long, slow summer of Frankie Addams’s twelfth year, everything is left incomplete, half-finished. A piano tuner plays a scale, stopping repeatedly on the seventh note (McCullers, *Member* 108). The blues play from a distant horn, telling the story of the summer, “that long season of trouble,” only to break off “just at the time when the tune should be laid” (44). For the entire summer, as Frankie awaits

her brother's impending wedding, "the things she saw and heard seemed to be left somehow unfinished, and there was a tightness in her that would not break" (25). The strange, unresolved time of summer that pervades Carson McCullers's third novel, *The Member of the Wedding* (1946) is the time of its protagonist's unbelonging. Frankie is "an unjoined person" who, as a minor who has not yet come of age, has "for a long time [...] belonged to no club and was a member of nothing in the world" (3). In her liminality, her old identifications disappear, and she begins to see herself as abnormal, pathological.

Without identity, not belonging to anything, Frankie begins wonders how or if others would know who she is. Her black caretaker Berenice suggests that she still belongs to her school, that she has an identity as a "student," "finished with the B section of seventh grade" (113). But Frankie no longer feels a part of the closed, neat world of school. Suddenly, there is a world beyond it, and that world is not "a school globe with all the countries neat and different colored"; instead, it is "huge and cracked and loose and turning at a thousand miles an hour" (23). Against the imperatives of propriety, Frankie abandons any given identity and moves towards pathology, imagining her house as an asylum and feeling herself a freak and a criminal, worrying that she'll be put in the freak show as she continues to sprout endlessly taller, or that she'll be put in jail as her restlessness turns to petty crime and a fascination with the violence inside her.

The confluence of concerns that pervade McCullers's novel—those of temporal (in)determination, the authority of scientific taxonomy over bodies, the parallel diagnostics of pathology and crime, negotiations between the imposition of

and desire for identity, and the role of all these in the epistemo-ontological organization of the world—are given a precise relation in a surprisingly different register more than forty years later in Hortense Spillers influential essay, “Mama’s Baby, Papa’s Maybe: An American Grammar Book.” Spillers’s text, brought into contact with McCullers’s, demonstrates that the same forces that regulate and determine minor life also operate with regards to race and gender, making of their difference another iteration of minority. Spillers is concerned with how the anoriginal flux of “flesh” of blackness is stilled into the taxonomized and commodified body as part of the global slave trade, and with the ongoing implications in the US for black femininity, which can be found in the continuously wielded pathologizing and punishing force of scientifico-legal policy-making (of which she cites the Moynihan Report as a prime example) (65-67). Here, I want to suggest that Spillers’s essay—which in the last instance draws on literature as an alternative epistemological force—provides a diagnostic that makes it possible to analyze what is at stake in these imbrications for those who are oppressed by them. This diagnostic that makes it possible to return to McCullers’s writing in order to identify the specific ways in which McCullers encounters and responds to such a confluence of forces. Indeed, Spillers’s insistence that the organization of time is the central mechanism of these combined institutions makes it possible to see how McCullers’s texts actualize Spillers’s political desire to:

strip down through the layers of attenuated meaning [imposed on black feminine flesh], made an excess in time, over time, assigned by a particular historical order, and there await whatever marvels of my own inventiveness. (Spillers 65).

How can and has time been produced against “a particular historical order”—one that has stilled life into identity-commodity-taxonomy and operates on such stilling (72, 78)—in order to combat the insistent force of seemingly inextricable law, science, and economy? How can new arrangements of time compose alternative possibilities for social organization?

The counter-force of a different conception of time than that of the historical order that concerns Spillers is what I call “revolutionary time,” and this revision of temporal arrangements enables a counter-practice of understanding, imagining, and producing the world, which I call “minor empiricism.” By way of Spillers’s text, I bring McCullers into contact with both the history of anthropology—which Spillers names as one of the central forces for producing ethnicity and sex as a taxonomic stillings (72)—and with Spillers’s ongoing investment in black feminism. The same legacies that concern Spillers show up in McCullers’s work, not only in the character of Berenice, who bears the effects of the stilling of black flesh, but also, first, by way of the presence of the Freak Show, which gives her the taxonomic grammar of self-pathologization. The freak show has its origins in anthropological displays of racialized bodies and medical demonstrations of pathology. Its displays of primitivized black bodies, “hermaphrodites,” and exceptional physiognomies categorized and caged brings together the identity concerns that pervade the rest of McCullers’s novel.⁴ As Rachel Adams notes, by the time of McCullers’s final novel,

⁴ See: Robert Bogdan, *Freak Show: Presenting Human Oddities for Amusement and Profit* (Chicago, IL, Univ. of Chicago Press, 1990). He shows that the freak show dream from the practices of natural science and late Victorian anthropology, putting new species and races on display, and often used quotes from doctors or natural

Clock without Hands (1953), she too is increasingly concerned with the effects of social science on legal and juridical policy, which shows up in the form of the Kinsey Report (1948).⁵ Through Spillers, then, I suggest it might be useful to link McCullers and her specific form of minor literary production not only to a group of black feminists who come after her—the Combahee River Collective—but also to a scientist, an anthropologist, who precedes her—Margaret Mead—in order to understand the descriptive force of the minor as a reconfiguration of time. And it is by way of Deleuze’s concept of empiricism that I suggest that such a produced relationship might be understood and made useful. By reading them together, a practice of study and analysis that understands the real relations among aesthetics, science, and politics emerges in as counter-mode of thinking and engaging the world: minor empiricism.

Deleuze describes empiricism as a way of organizing perceptions that *intensifies* rather than “stills” time and produces subjectivity (Deleuze, *Empiricism* 16). Although twentieth-century positivism, as the current instantiation of scientific “empiricism” that grounds corporate science in relentless data-production, is primarily understood to name a conception of science that is non-reflexive about its

scientists in the exhibits (6, 9). He also demonstrates the relationship between freak exhibits and medical science inquiry, and notes that the exhibits would sometimes be accompanied by medical pamphlets about the pathologies they spectacularized (230).

⁵ In “‘A Mixture of Freak and Delicious’: The Queer Fiction of Carson McCullers,” Adams work details the historically specific use of the figures of the freak and queer, and the ways in which such figures map with contemporary queer theory. She is largely responsible for bringing McCullers, who had fallen out of critical purview shortly after the publication of her last novel, back into critical interest both for queer studies and disability studies.

own origins and methods, Deleuze actually affirms positivism in that it names science as a *positive* practice of creating real relations among objects in a determined plane of reference. Science *slows* down the formation of objects in order to make them visible, objects that are always taking form out of and disappearing into chaos (Deleuze, *Philosophy* 119-121). But he only affirms it insofar as science makes objects by creating a plane of reference; those references or relations are made possible by a set of limits or borders that make from ongoing chaos a field to be ordered or rationalized in order to make action possible.

Science here does not appear as a particular method. Instead, science, as a way of organizing knowledge and life that is immanent to the conditions in which it appears, is but one way of producing relations, of *creating* a positive organization by cutting a region out of the irrational and rationalizing or organizing it.⁶ This is a neutral, or even positive description of science's ideal capacities, but it is one that can be perverted, as it is in the intensive and institutionalized stillings of twentieth-century positivism. Twentieth-century positivism—in both its practice and popular perception—erases the originary moment of the production of rationality out of the irrational; rationality is not given, but produced, as a practice of organization. Such organization can be disrupted through disorganization, but such disorganization requires both a disruption of the conventional understandings of sensorial perception, which we might call aesthetic disruptions, and the force of belief—belief

⁶ See the previous chapter of this dissertation for a longer discussion of debates over chaos and rationality—and the possibility of a fully rational world or a fully rational description of the world—by way of science, especially as it plays out in quantum and classical physics.

in the world—as the grounds for producing a new frame of reference or plane of composition.⁷ It is via this reconfiguration/minoritization of what empiricism has become in the twentieth century that the relationship between art, science, and politics becomes available in ways that are often masked by its twentieth-century iteration.

It might seem strange to suggest that a novel operates via an empirical practice, and even more so because I am suggesting that the minor empiricism of McCullers, along with Combahee, and Mead is used to critique and challenge scientific practices and popular perceptions of science. “Science” had come to denote a field unified by a method and characterized by—providing the hallmark for—technical proficiency and expertise. However, the power of science, as a series of methodologically mutating, reflexive and immanent practices, for making the world comprehensible and for altering the conditions of the world—in fact, making *another world* of and from this world—is a repeated if understated theme of McCullers’s fiction that also shows up in Combahee’s influential *Statement* (1977) and Mead’s first publication, *Coming of Age in Samoa* (1928). I suggest, then, that all

⁷ As with my other chapters, I am using aesthetics in both an older and contemporary sense: in the Greek sense of perception and feeling and the current scientific connotation of the study of sensori-emotional values and their production. While I am not excluding aesthetics in the sense that comes from a German aesthetic tradition (beauty, taste, moral good), such a definition is only part of much more complex field of sensorial experience that is necessary for talking about the interrelationships among art (including literature), science, and politics. In fact, the German aesthetic definition is part and parcel of a privileging of particular values and denigration of a larger field of sensorial value-production—which values only part of aesthetic experience and erases the multiple ways in which aesthetic determinations structure epistemology—some of the effects of which this chapter aims to investigate.

of their writing, as practices of descriptive experimentation, not only affirm aspects of science as a set of practices rather than a unified field, but also share something with productive rather than fatalizing or fully determined scientific experimentation. Specifically they participate in those experimental practices I explored in the first chapter under the name “valuable experiments.” These operate not so much to reveal the given to knowledge, but instead produce descriptive practices, via the aesthetic, that can reconfigure the frame in which a codified and supposedly unified twentieth-century science came to operate. They reconfigure and cut aesthetic forms in order to produce new sensorial arrangements from which to begin new arrangements of thought.

Such reconfigurations require breaking from the twentieth-century conception of science as “objective”—in which objective means “value free”—and affirming the personal (subjective), political, and aesthetic dimensions of scientific practice. Making such a break is done through a return to and disruption of the frames and limits within which science makes its determinations (and, via “objectivity” codes as telos). These disruptions are enacted by using the violent, creative, disorganizing and organizing capacities of aesthetics in order to resist the stilling of temporal flux that occurs in the particularly damaging temporal incrementalizations and biological taxonomizations of human social life that are the legacies of what Auguste Comte called the moral sciences, and which gained

increasing power in the twentieth century as social science.⁸ These social sciences increasingly borrowed an already disingenuous rhetoric of “disinterest”—a specifically twentieth century invention—from the natural and physical sciences. Such rhetoric, even when aimed at social justice, often operated as a way of enforcing a dominant civil order, the very order that had produced the currents of the science it named. The enforced order was (is) that of white, patriarchal capitalism. As an effect of contemporary and especially popular understandings of science, this order appears as the rational and given means for ordering social life—rather than as one chosen rationalism, the epistemological determinations of which are neither coextensive with nor prescriptive of ontology. The presentation of science as unified, transparent, descriptive of a given (natural) order, and fully accessible in all aspects of life through a shared rational method in turn papered over the *moralizing* injunctions of such a science imagined as merely and necessarily natural.

In what follows, I bring McCullers into conversation with Margaret Mead and the Combahee River Collective in order to illuminate the history and repercussions of the invention of value-free science—which was largely enabled through the pedagogical invention of the “scientific method” as part of changes to secondary education—in order to show the ways in which these three thinkers participated in ongoing/repeated valuable experiments. Their experiments are correctives to the separation or erasure of both the aesthetic and political dimensions of institutional

⁸ See previous chapter with regards to the difference between this conception of “objective” and a conception of it as a way of speaking about real objects, but not one that would take the description itself as transparent or neutral or given.

and everyday (as well as techno-) science. They also work together to show the long-term effects of the rhetoric of minority—beginning with the figure of the adolescent minor—has come to be exerted with great force to link the pathologies of race and gender as irrational. Minor empiricism operates by a constant reintegration of or renegotiation with the irrational that traverses the rational. McCullers, Mead, and Combahee, at different moments and in different ways, find themselves needing to intervene against the political effects of a science that rhetorically divorces itself from politics; and they do so through the development of a disruptive and experimental descriptive practice that can reveal the relations papered over by this rhetoric of disinterest.

All three thinkers are interested in “minority” in multiple senses, including childhood as well as racial, class, and gender minority. These are linked historically through the production of irrationality. As Holly Brewer writes in *By Birth or Consent: Children, Law, and the Anglo American Revolution in Authority*, the minor child is first invented as irrational and therefore not capable of participating in democracy, or political decision-making, and in need of a rigid paternalism for Anglo-American culture in the eighteenth century.⁹ And then the same rhetoric was repeatedly applied to other minorities as a justification for colonial control. Their collective irrationality was then frequently and conveniently “proven” through science, including anthropology.

⁹ See: Holly Brewer, *By Birth or Consent: Children, Law, and the Anglo American Revolution in Authority* (Chapel Hill, NC: Univ. of North Carolina Press, 2007).

By reading Mead, a scientist, McCullers, an author, and Combahee, a political and social collective, together, I show how the practices of a dominant empiricism emerge from a set of aesthetic determinations that allow science to dictate a given or natural. But, without the reflexivity inherent in the origins of empiricism (the recognition of belief), the political repercussions are dire. By beginning not from disinterest, but from interest, need, and a political position, all three produce minor empiricisms—which is to say, a practice of study—that can intervene against the particular forms of science that are increasingly oppressing them. In particular, their investment in *study* as an ongoing form not invested in mastery allows them to change their understanding of time, rejecting progressive or teleological time for revolutionary time. Revolutionary time does not see rationality or a fully-ordered society as its end-goal, but instead is invested in the ongoing struggle to organize chaos in ways that do not ever form a totality the related institutionalized structures that separate people from each other. They invent new ways of breaking down those barriers and becoming or staying half-formed, always becoming, or crossing from one to the other, via strategic practices. They refuse the very desirability of coming into recognizable and dominant form (majority) in favor of the minor people Deleuze describes as “eternally minor, becoming revolutionary” (Deleuze, “Literature” 228). They relink experience and experiment: two major facets of empiricism historically, which had been separated or erased through the production of twentieth century positivism. In doing so, they refuse the need for a unified counter-program in favor of the actualization of collectives that struggle together. In doing so, produce their own revolutionary-being, as an ongoing process of

becoming-revolutionary, rather than deferring actualization to the “after” of revolution.

Even as the writers I name—McCullers, Mead, and Combahee—may seem to bear only the slightest relation to one another, one that may seem “merely” conceptual, I want to here affirm again the larger reading practice of my dissertation, which consists of collapsing temporal separations—sidestepping a one kind of historicist practice that begins from a causal or progressive narrative—and placing seemingly unrelated figures in parataxis. This method is, in part, what I would call my own practice of empiricism. Although I have at times throughout the dissertation equated empiricism with the crass positivism I outlined earlier, I hope I have been clear that that is a particularly twentieth century version of empiricism, which does not totalize the field of empirical possibility. Empiricism, as it emerges out of David Hume and, more precisely (for my interests), as it is articulated in Gilles Deleuze’s minor and revisionary reading of Hume, is best understood as a philosophical practice—one that grounds science—of the production of *external* relations, relations that “are external to their terms.” These relations are both *real* and *external to* those things that are associated, unable to be explained by or reduced to the terms that constitute them (Deleuze, *Empiricism* 99-100). Once made, these relations become real things, at another level, not fully attributable to the orders that were the grounds of their creation. Empiricism as a productive and descriptive practice that probes relations that also precede their production and offer new ways for making determinations offers a more fruitful way of thinking empiricism as *valuable experiment* than does a twentieth-century positivist

empiricism. For that positivist empiricism, experiments are understood to reveal already existing structures rather than making them, erasing the real productions of subjectivity. By making relations among Mead, McCullers, and Combahee, I hope to affirm the associations they make among science, politics, and aesthetics as a reality with consequences for disrupting the ongoing bad faith, disbelieving science and/as politics that continue(s) to pathologize difference and evacuate those deemed pathological of their political effectivity, enabling them to produce autonomous alternatives through their minor sciences.

Disrupting *Bildung*: Eternally Minor

Told in close third-person narration that moves in and out of free indirect discourse, McCullers's *The Member of the Wedding* is divided into three parts with each revealing the story of a different version of its white, working-class, female protagonist: Frankie Addams, F. Jasmine, and finally, Frances. In the second and longest section, which takes place over the course of a single day, Frankie experiences a sudden and strange new feeling that prompts her to become F. Jasmine, "grown and free" and able to enter—as she imagines it—into a marriage contract with her brother and his bride, to marry the wedding itself (58). This theme of the passage from student to autonomous adult suggests that the novel might be read as a *bildungsroman* in the sense described by Franco Moretti, tracing the development of a youthful life into adult rationality and proper socialization.¹⁰

¹⁰ See: Franco Moretti, *The Way of the World: The Bildungsroman in European Culture* (London, UK: Verso, 1987). In Moretti's account, the *bildungsroman* takes

Unsurprisingly, such a genre emerged not long after childhood had itself been constituted as a period of irrationality. Prior to the eighteenth century, children were considered the same as adults under the law; able, for example, to enter into legal contracts. The bildungsroman offered a way of narrating the change in identity from childhood to adulthood, irrationality to rationality.¹¹ But there is a duality to the narration of *Member*, in which a gap exists between Frankie's self-perception of her coming-of-age and the perception of the almost-Frankie narrator that confuses this trajectory. The gap widens in the final section, and Frances-nee-Frankie is depicted from a point of distance and closure, as though the narrator is now fully outside the world of the story and can, from an external standpoint, totalize the novel into a coherent whole by pointing to the Frances Addams's eventual proper adulthood. No longer the autonomous, self-proclaimed adult of F. Jasmine, Frances has returned to school and has been normalized, suggesting that the true ending—the true coming-of-age and the generic fulfillment of the novel—is yet to come.

If we see the narrative as having a dual ending—one in which F. Jasmine comes into adulthood (Section 2), and the other in which Frances remains a school-girl on her way to adulthood (Section 3)—neither of which offers a true ending or proper generic closure—it becomes clear that if the novel is a bildungsroman, it is a strange, queer one. Unlike Goethe's *Wilhelm Meister*, Frankie's relentless drive to

youth as its central theme and coming-of-age through education as its central mode for producing a dialectical resolution of life experiences culminating in autonomous individuality or proper socialization in adulthood. Goethe's *The Apprenticeship of Wilhelm Meister* is given as the foundational exemplar.

¹¹ See: Brewer, *By Birth or Consent*.

come of age happens not over the narrative arc of a lifetime but rather in the space of a single summer—or more accurately, a summer day—as she passes from Frankie to F. Jasmine. Foregoing the progress tale of “education,” she makes a leap that collapses the temporal requirements of the *bildungsroman*. And this leap, however temporary, tenuous, fantastical, and ultimately thwarted it may be, is not the story of passing into proper professionalization and the capacity to write capital H history (of her own life or any other) that Wilhelm accomplishes when he joins the Tower Society; it is, instead, the story of queer desire and improper belonging, the dream ending of which would find her in a three-way marriage with her brother and his bride. Frankie, in the fantastical adulthood of F. Jasmine, is an unsuitable adult who can only be read as either a child who irrationally believes she is an adult or an adult who is irrational, childish. She is—as McCullers’s biographer would later say of the writer herself—a “‘woman still a child’ [...] a frightening chimera, foreign to the world as it should be, a ceaselessly improper, permanently unacceptable personality” (Savigneau 6). Frankie’s coming-of-age actualizes her inbetweenness, making a claim to it not as a temporary moment of disidentification from given states, but as an ongoing process that refuses to resolve, which requires traversing multiple ill-formed and illegitimate identities in order to appear. The queer, freakish, mad, and criminal identities she has associated with herself throughout the first section of the novel—identities that, like childhood, have, historically, been assigned an irrational character—are, in the figure of F. Jasmine, no longer experienced as pathological, but instead as useful.¹² As a self-proclaimed adult, she

¹² See chapter 4, “Subjects or Citizens: Inherited Right versus Reason, Merit, and

authorizes herself to make her own claim to (a different) rationality. It is only the practical failure to continue this strange adulthood she has started, to make it into a permanent majority, that returns Frankie to her minority again at the novel's end, to childhood forever, now normalized.

But in another light, we might read the novel less as a failed bildungsroman, and more as a resistance to the form itself, a resistance to the *value* the generic conventions place on the solidification of a life-narrative in a recognizable and proper adulthood produced through education-qua-identity-training. In *Member*, Frankie does not fail to come into majority, but refuses the desirability of majority, of the major. What Frankie has been resisting all along in feeling not a member with the girls in her working-class town a few years older than she is the version of the girl she becomes as Frances. She resists the becoming the girl whose circumstances determine a coming into majority that will mean not access to dominant citizen-subjectivity, but instead a thwarting of her queer desires and a future trapped by the conventions of midcentury femininity, endless working class waged labor, and domestic chores. In rejecting the desirability and false promises of majority—both in terms of age and as a subject position that would name a rational citizen-subject against the irrationality of childhood and minority more generally—she makes a temporal leap that actualizes the possibilities of the irrational, the minor. The novel becomes an occasion for tapping into the power of the minor—found not only in Frankie but also in her black caretaker Berenice and her younger, gender-bending

Virtue" in Brewer's *By Birth or Consent* for a discussion of how the invention of childhood irrationality was then applied to women and colonial subjects through rhetoric that equated them with children.

cousin John Henry. It becomes an occasion for enacting what philosopher Gilles Deleuze suggests is the function of minor literature, “to invent a people [...not] called upon to dominate the world,” but a “minor people, eternally minor, taken up in becoming revolutionary” (Deleuze, “Literature,” 228).

Disrupting the taxonomizing and pathologizing—which is to say, dividing and denigrating—organizational force of the “freak show,” the mad house, and the prison, McCuller’s uses the long center section of the novel to experiment with a collective descriptive practice, joined by those who share her minority, disrupting the progressive time of science, law, and History in order to make a leap that will enable her to make of and from this world a new world, antithetical to the dividing and normalizing forces of the law that would see her *de facto* queer community as criminals and to the scientific rhetoric that would make them abnormal and pathological, freaks. The world previously neat and connected has become cracked and loose—and this new (de)formation of the world becomes an occasion for world-making. The descriptive practice does so by producing a “minor empiricism,” that not only describes and makes perceptions available to thought, but also reflects on that very process in order to constantly refuse its naturalization and enable new arrangements.

This is a practice that wrests empiricism from the grips of twentieth-century positivism and returns to it the force of belief, of choice—made available through new sensorial, aesthetic arrangements—as the grounds for producing and organizing knowledge differently. It affirms the production of “the identity of thought with choice as determination of the indeterminable [. . .] the simple belief of

the one who chooses to choose (and restores the world and life)” (Deleuze, *Cinema* 177). Minor empiricism produces description as a practice of composition that experiments with the experience that is the very grounds of its possibility, and does so by prolonging the immanent time of experience, emphasizing duration rather than progress, incrementalization or periodization, all of which would be determined teleologically. Time instead operates instead as flux, or what Spillers calls flesh: corporeal experience unstilled by the time of a juridico-scientific economy (Spillers 67, 78).

Although “science” as a powerful force in producing divisions wouldn’t appear explicitly in McCullers’s work until her final novel, *Clock without Hands* (1953), a more general concern with the divisions among people—and the way in which seemingly competing narratives of oppression divide understandings of experience—is already central to her first novel. The characters who move through *The Heart Is a Lonely Hunter* (1940) share intense feelings of oppression and desires to effect social change in the world to which they belong. Yet they never seem less alone than when they are together, never seem less connected than when they are close enough to wall each other out. Despite this, they still form something of a de facto community made up of a black Marxist doctor, a white adolescent girl, a gender-curious business owner, and a drunken labor organizer, who all gather together around and through a deaf mute of illegible origin, Singer.

Late in the pages of the novel, Singer describes this motley crew in a letter to his friend Antonapoulos, also a deaf mute who has been put in an asylum in lieu of

being imprisoned for petty crimes. In the letter, Singer writes of these characters' disjoined and passionate conversations with him, saying:

This is the way they talk when they come to my room. These words in their heart do not let them rest, so they are always very busy. Then you would think when they are together they would be like those of the [deaf mute] Society who meet at the convention in Macon this week. But that is not so. They all came to my room at the same time today. They sat like they were from different cities. They were even rude, and you know how I have always said that to be rude and not attend to the feelings of others is wrong. So it was like that. I do not understand, so I write to you because I think you will understand. I have queer feelings. For I have written of this matter enough and I know you are weary of it. I am also. (McCullers, *Heart* 184)

Singer—who is looking unsuccessfully to Antonapoulos, just as the four others look to him, to be understood—clarifies that by “busy” he does “not mean that they work at their jobs all day and night but that they have much business on their minds” (182). Each is preoccupied with a personal but forceful dissatisfaction about his/her existing social situation, which each intermittently recognizes as the product of larger political forces, they all have difficulty expressing these oppressive feelings in any comprehensible way to those who do (or might) listen. But these seemingly disconnected dissatisfactions also compel them together, to Singer as a point of identification or intersection. Singer’s “queer feelings,” like those that later pervade *Member*, indicate the liminal, interstitial, or undetermined (becoming) relationships that occur at the margin. Despite overt differences in the social manifestations of their affective turmoil, they come to Singer in a way that resembles what the Combahee River Collective would say, several decades later, of their own coming together as a means for overcoming their socially-imposed feelings of craziness, which enabled the birth of their “identity politics” (15). When they came together,

each “came out of a strongly-felt need for some level of possibility that did not previously exist in her life” (Combahee 19).

In 1977, the Combahee River Collective, a group of black lesbian feminists operating in the Boston area, composed a statement as part of an ongoing “process of defining and clarifying [their] politics” (13). In it, they detailed their political beliefs and the specific “herstory” of their self-organization. Their Statement, which is today considered one of the most influential texts of black feminism, is largely lauded—especially in the context of academic feminism—for its articulation of “interlocking” oppressions, which Kimberle Crenshaw and Patricia Hill Collins would later formalize and institutionalize in an analytic practice of “intersectionality” a decade later. The Collective writes:

The most general statement of our politics at the present time would be that we are actively committed to struggling against racial, sexual, heterosexual, and class oppression, and see as our particular task the development of integrated analysis and practice based upon the fact that the major systems of oppression are interlocking. (Combahee 13)

Departing from an insistence on patriarchy as the sole foundational locus of women’s oppression espoused by much second-wave radical (and predominantly white) feminism, the Collective asserts that oppression has multiple origins and “the synthesis of these oppressions creates the conditions of our lives.” They understand that radical movements which fully identify with and ground themselves in—as the term “radical” implies—a singular root fail to fully account for the oppressions of group members, whose interests are likely to be multiple and whose access to power differentially arranged.

Although the Collective is credited with “coining the term *identity politics*,” historian Michelle Murphy points out that for them, *identity politics* “does not affirm a single epistemically privileged identity or name an authentically revolutionary subject position” (39). Instead, in her book *Seizing the Means of Reproduction: Entanglements of Feminism, Health, and Technoscience*, Murphy notes that their “identity politics” “draws out the contradictions formed at the axis of race, class, sexuality, and gender, as well as logics of capitalism and state violence, that require *disidentification* from any singular identity and thus the recognition of contradictory difference.” Perhaps a more precise way of describing the role of *disidentification* that Murphy recognizes as a central feature of Combahee’s identity politics would be to say that intersectional identity politics is a practice that operates in a series of epistemologically reflexive and politically strategic relays between identification and disidentification. Such relays allow the Collective to account for the amalgamations and negotiations of non-totalizing identities they call their “whole life situation” (Combahee 14).

Murphy’s book is interested in a broad field of US-based feminist activism in the 1970s that was engaged in debates about health, reproduction, and technoscience. Her analysis of Combahee is primarily concerned with how their identity politics’ reliance on *disidentification* helps to illuminate their particular contributions to—and breaks from—this feminist landscape that often attempted to unify feminists under the universalizing and deracinated umbrella of “woman.” Undoubtedly, the intersectional analytic developed by the group and the practices of identity politics it enabled are vital contributions to ongoing attempts to make

visible, understand, and struggle against specific, seemingly competing, and often mutating forms of oppression that traverse lives and cannot be fully subsumed by static or singular identity categories. Moreover, Murphy's attention to the centrality of science and technoscience, especially as they were imbricated in methods of legal and economic control, to Combahee's concerns is especially insightful.

By the second half of the twentieth century, the desire to make a possibility that did not exist—the compulsion of the not yet—that brought McCullers's characters and Combahee's members together, had emerged in a very different way in US technoscience. It appeared not merely as a social possibility but as a moral imperative in the drive to knowledge and/as control that was to be found in increasing corporatization of technologically guided science and its mobilization in policy decisions. This seemingly rational and unstoppable force of science and technology as the not-yet—which Kodwo Eshun would eventually term “the futures industry”—was a far cry from the shared desire of community making that fueled McCullers's novels and Combahee's collectivization. That the omnipresent force of this technoscience imperative was exerted most strongly on women and/as people of color, whose experience attested to the personal and political interest of science, made its attack a necessary avenue of resistance for Combahee.¹³

As historian of science Theodore M. Porter documents, the idea of science as “disengaged” and of empiricism—or the study of evidence gained through

¹³ For a detailed analysis of “the futures industry” and its relationship to race, especially as depicted in the genre of literature now called “Afrofuturism,” see: Kodwo Eshun, “Further Considerations on Afrofuturism,” *CR: The New Centennial Review* 3:2 (Summer 2003): 287-302.

experimentation and observation—as methodical and disinterested is a twentieth-century historical invention that insists on the separation of scientific questions from the conditions of politics or personal life (Porter 292). Paradoxically, this pervasive view of science’s imagined political neutrality has, in the hands of policy-makers, “become one of the key supports for the authority of science in regard to practical, contested decisions about public investment, medicine, public health, and environmental questions” (305). Often, in both popular and professional understandings of science, its construction and historicity are put under erasure; the authority of twentieth-century empiricism is tied to its perceived universality and transparent facticity, to its supposed revelation of nature given readily as “data.” As a result, civic political processes demand “the authority of objectivity,” and empirical data and scientific answers become inseparable from policy decisions. So it continues that “the currents of science and technology overflow everywhere the boundary between ought and is” (308).¹⁴ And “objectivity,” now synonymous with value-neutrality, ironically gives science its insistent moral force. Of course, many practicing scientists recognize their positionality and interests, but they are

¹⁴ In the contemporary US political landscape, especially from liberal factions, often the objection is lodged that *science* does not have a strong enough hold, and policy decisions around crucial issues—such as, for example, climate change—ignore rather than adhere to the recommendations of scientists. It is important to note, however, that what is often meant by such statements is that policy decisions are being based on conservative or *bad* science over and against different data sets and, presumably, more rigorous empirical and interpretive practices. But regardless, *science*—whether reputable or not—is still the primary evidentiary factor in decision-making. Debates rage over what counts as science, but not over whether or not “science” is the best means for making decisions.

still compelled by empiricism as a perhaps imperfect but *more objective* approach to knowledge. Objectivity is still imagined as an ideal.

The projects and policies referenced in Combahee's Statement indicate that they are burdened not only by the proliferation of technoscientific imperatives, but also by a longer history of scientific taxonomization and hierarchization that produced identities and pathologized them. For Combahee, "science" in both its popular and policy deployments operated not to produce value-neutral information but as a kind of moralism that could wield variable strategies grounded in different sciences to alienate communities from one another and produce social control. This built on a history of scientific politics that first emerged in the taxonomies of royal science and was perpetuated in the microfascisms of scientific technocracy. Scientific moralism, often coded as "health," and its political deployment have a long history, which originates in what Deleuze and Felix Guattari call "royal science" (Deleuze and Guattari, *Plateaus* 360-366)—that science which produces taxonomies of genus and species, well and ill, around norms—which Georges Canguilhem describes as a foundational organizing principle of modern Western culture: the separation of the normal from the pathological.¹⁵

The explosion of technoscience in the second half of the twentieth century allowed the continued moralism of science, which had long operated through the denigration of the pathological and valorization of the normal, to take on more intimate and pervasive roles in the politics and procedures of every day life. The

¹⁵ See: Deleuze and Guattari, *A Thousand Plateaus* 362; and Georges Canguilhem, *The Normal and the Pathological*.

truism (detached from any specific object) that more knowledge is better, and knowledge unmediated by opinion—which is to say, empirical, objective knowledge; “having the facts”—is the best means of making decisions helped validate personal data collection, increased surveillance, and the naturalization of data-driven prescriptions for personal, social, and civic health at even the most microscopic levels. However, as the prescriptive translations of “objective” science were increasingly coded as inevitable and fully determined, the detrimental effects of this highly masculinized, militarized, and universalizing science continued to multiply and intensify, appearing as new strategies for population control. “Science”—supposedly unified by a rational, methodical process known as “the scientific method”—wielded a colonizing force that could not be separated from the primarily white male institution and the state and capitalists interests funding it, which were developing practices and technologies aimed at invading and proscribing the lives of the urban and rural poor, women, youth, gays and lesbians, and communities of color.

Although science does not appear as an explicit theme of McCullers’s fiction until her fourth and final novel, *Clock without Hands* (1953), her writing, beginning with *Heart* (1940) traverses the same period covered by the other authors of my dissertation—William Burroughs and Ralph Ellison—and also encounters the changing face of science and its increasing use in intensifying psychological pathologization and criminalization along raced, classed and gendered lines through the middle decades of the century. As I have already detailed in the previous two chapters, in this period, beginning in the 1930s and continuing through the 1970s,

the ongoing scientification of psychology and criminology produced an insistent legal force that pathologized difference in highly codified ways and punished its political manifestations. Although I primarily focused in those earlier chapters on how these changes played out in the psycho-carceral system, McCullers and Combahee help us to see how these changes also had effects on those for whom it was not useful for the law to pathologize *as* criminals, and who were differently policed and regulated through the related scientification of the entire legal-judicial apparatus and the invasive capacities of militarized and corporate technoscience. Reading McCullers and Combahee—and eventually Mead—in combination with those writers and scientists I considered in my earlier chapters, helps to map the various strategies by which “rationality”—expressed most fully in a unified “science”—was mobilized to totalize the field of the social (qua political), and produced as an inescapable and fated force, which made it incredibly difficult for those who were pathologized through longstanding scientific and legal legacies as *irrational* to intervene politically unless they capitulated to the (false) pure rationality of science and empirical imperatives.¹⁶ And then, usually at best they

¹⁶ Throughout this chapter, I make difference between being “determined”—which names the conditions of being *actual*, having a material existence that constrains invention—and being “fully determined” or fated, which would name a condition of having the material determinations of real existence prescribe fully a future (telos). This distinction is, I think, crucial for understanding experimentalism, both in and outside of science; such a distinction—between determinism and fatalism—in relation to science and as a feature of literary understanding is made by Emile Zola in his first explication of experimental literature in “The Experimental Novel.” See: Emile Zola, *The Experimental Novel and Other Essays* (New York, NY: Haskell House, 1964): 22-23, 29.

were embattled in lengthy reform measures that only offered patches for a leaking system.

Science and/as Law

By the middle of the 1970s, when the Combahee River Collective became operational, the prison system was several decades established as a bad-faith mental health and “correctional” facility, as was its use of mental health diagnoses—both formal and informal—to pathologize anti- or non-normative life and evacuate the associated practices of these lives of any political effectivity.¹⁷ Simultaneously, the discursive and practical changes in prison practice were enabled and reinforced by the increasing dependence of the judicial system on scientific and social scientific evidence and spatio-temporal organization—a change that found “technoscience” to be increasingly the primary and most authoritative form of evidence acceptable in juridical proceedings.¹⁸ By the time of Combahee’s writing, the scientification of the legal system had taken on a spectacular force, with almost every aspect of the judicial and prison system imbued with and structured by highly technical, supposedly objective, and thoroughly obscuring and abstracting scientific demands.

¹⁷ See both of my previous chapters for details regarding this transition in the prison system and psychiatric practice.

¹⁸ See: Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, NJ: Princeton Univ. Press, 2011); also, Thomas Keenan and Eyan Weizman, “Mengele’s Skull,” *Cabinet* 43 (Fall 2011); and Simon A. Cole, “Forensic Culture as Epistemic Culture: The Sociology of Forensic Science,” *Studies in History and Philosophy of Biological and Biomedical Sciences*, 44:1 (2013): 36-46.

The answer to these demands for empirical, data-driven accounts of social life, which appeared in forms such as the Moynihan report, were often commissioned by the government or corporations and were so influential in producing legal and state policy as to be virtually inseparable from policy itself. Living at a great distance from the white, male, heterosexual norm of citizen-subjectivity, the members of Combahee were keenly aware of the intensified and naturalized imbrication of scientific, medical, and judicial authority that mobilized psychological diagnostics and technoscience forensics in order to imprison men and women of color and handicap their communities. They were also aware of the continued rhetorical prevalence of biological determinism and differential access to and enforcement of medical and health care practices that took its toll most strongly on black female bodies and black families.

Because science had taken on such a powerful role in everyday life, Combahee's political project necessarily operates with and through scientific practices rather than rejecting them. While Combahee's Statement undoubtedly takes a critical tack with regards to some of the instantiations of science and technoscience in their lives and the lives of those with whom they professed solidarity, it also expresses a more positive hope for the possibilities of empirical inquiry, thus making their relationship to "science" in any general sense far less clear. In fact, given that they reference a number of major technoscience and juridico-scientific problems, but primarily in indirect and allusive ways—as lists of court cases or pieces of broader struggles in which they are involved—"science" appears already in their work as less of a unified field and more of a set of strategies

mobilized in multiple and competing ways for or against particular political interests. Science and its uses are already divorced from the popular vision of a unified science or the pervasive conceptions of it as apolitical; sciences are, instead, first and foremost political problems and potential strategic nodes.

Combahee's complex investment in the utility of science is evinced by the list of political projects with which they find themselves involved—from the trials of Joan Little and Inez Garcia to “sterilization abuse [and] abortion rights” campaigns to concerns about the legacies of “biological determinism” (20-21, 17). For example, they protested in support of Joan Little who had killed her rapist and was compelled by her first lawyer—to the chagrin of many feminists—to use an “insanity” defense. The defense failed, and in a subsequent trial, Little was found innocent on grounds of “self-defense.” Although the pathologization of a feminized victimhood (as “insanity”) was unsuccessful, it reflected an ongoing trend within the judicial system to evacuate the political force from responses to gendered or racial violence through the name of “mental illness.” Combahee was also involved in the case of Inez Garcia, but in this instance, they were on the side that advocated for scientific jury selection. Although in the case of Garcia—who had also killed her rapist—the name of science was used to choose a more favorable jury that might exonerate her, its use also marks an important moment in which scientificity appeared as the hallmark of fairness and justice.

Presciently, these concerns were also central to Carson McCullers's writing two decades before Combahee's formation. By the time of the writing of her fourth and final novel, the previously proximate themes of indeterminate (undetermined)

time, the authority of science, the value and limits of medicine, the pervasiveness of race-based criminalization, the ongoing reality of gender and sexual pathologization, and the relays between intersecting and competing identities—all of which had paratactically pervaded her earlier novels—are brought into sharp, clear relation. As with her first novel, *The Heart Is a Lonely Hunter*, McCullers's last novel, *Clock without Hands* (1953) is also told from the close third-person perspective of several central characters. (*Member*, by contrast, is primarily told through the close third-person perspective of a single character.) *Clock* is continuous with both *Heart* and *Member* in that it concerns the lives of those who dwell in a small working-class Southern town and the movements of its adolescent and black characters. But, in a stark departure from the earlier two novels, the queer adolescent presence threatened by, resisting, and teetering tenuously, tremulously on the precipice of majority is male rather than female.

By 1953, the women in McCullers's novel seem to have little of the (albeit ambivalent and constantly thwarted) political potentials and desires they had evinced in her earlier novels; for the most part, either dead or disappeared at the hands of patriarchal and legal control, the women of *Clock* seem to have suffered the fates that Mick in *Heart* and Frankie in *Member* feared would be theirs if forced to adopt the trappings of midcentury femininity: the boredom of repetitive domestic or shop labor and a scripted (prescribed, circumscribed) relationship to world engagement, which, when depicted as success or privilege, left them little capacity to articulate their experience in political terms. Unlike Mick and Frankie, seventeen-year-old Jester Clane, grandson of the town judge, on the verge of being of legal age

is poised to fulfill the true promises—or threats—of majority: a place as a full subject-citizen, and—as is clear to Jester—an almost unavoidable role, whether witting or unwitting as an oppressor.

In *Clock*, the town of Milan, Georgia experiences increasing racial turmoil as *Brown v. the Board of Education* heads towards the Supreme Court. On the dawn of school integration, Jester himself experiences newly burgeoning sexual desire and psychological turmoil. He has fallen in love with Sherman Pew, a young, male, mixed-race employee of his grandfather's with a "golden [...] once-in-a-century [singing] voice" (McCullers *Clock* 80). As a result, although *Brown* was central to legal struggles for rejecting the legitimacy of racial science that justified segregation—a feat largely accomplished through the counter-findings of more than thirty social scientists enlisted by Thurgood Marshall to detail the pernicious effects of segregation on both black and white children—the case is not central to concerns about science in *Clock*. Instead, the questions raised about the power of science, its production of pathology, and the enlistment of such pathologization in practices of criminalization, as well as the potentials for shared identification or disidentification within the pages of the novel relate primarily to the recently published Kinsey Report: *Sexual Behavior in the Human Male* (1948).

Almost twenty years after Kinsey's publication, the Moynihan Report would eclipse Kinsey as perhaps the most influential social science findings of twentieth-century US culture, and it would do so in large part because its pathologization of black maternity and black male homosexuality was linked so explicitly to national

policy decisions.¹⁹ But the potential force of science and its intimate ties to juridical procedures was already apparent to McCullers, which she highlights through a conversation Jester has with his judge grandfather about the Kinsey Report. Jester, politically and socially impassioned by Sherman's golden voice and tales of the Golden Nigerians—a(n invented) radical black activist group—has the previous night, gone to a prostitute and lost his virginity. . . while picturing the face of Sherman Pew. Returning home, angry at his grandfather's questioning as well as the judge's virulent, righteous segregationism and self-congratulatory access to knowledge-power, Jester bates him: "[H]ave you ever read the Kinsey Report?" he asks (McCullers *Clock* 92). His grandfather replies, "It's just tomfoolery and filth." Jester rebuts, in an attempt to bolster his newfound claim to "manhood" and therefore his right to autonomy and his own knowledge about *both* race and sex, which he believes himself to have gained through his sexual encounter: "It's a scientific survey." For Jester, the Report, by virtue of its scientificity cannot be "filth"; it is value-neutral—a *scientific survey*—and his appeal to its "scientific" validity is an appeal to *valid* knowledge that he has in excess of his grandfather's. The judge on the other hand, who has (like Jester) been titillated by the report, which he read "with salacious pleasure," rejects not the value of science for revealing human nature, but the scientificity of the study itself, and his grandson's claims. "Science, my foot," he says. That the report produces a set of feelings, an experience of one's own sexuality, indicates for the judge both implicit (im)moral

¹⁹ See: Mumford, "Untangling Pathology."

values within the report itself and his need to make value judgments about it. As a result, he has it banned from the Milan library.

In their ensuing debate over whether the Report is indeed science or, instead, pornography, Jester uses the report to validate his sexual encounter from the previous night as not merely *normal* but *necessary*. He says, “It proves that boys my age have sexual affairs, boys even younger, but at my age it’s a necessity—if they’re passionate, I mean” (92). But it is quickly revealed that Jester’s greatest fear is that he is *not normal*, not because he had sex, but because he had never before had sexual urges for women. The word “normal” becomes central to his internal vocabulary, and fear of the scientized, medicalized pathology of homosexuality takes on an insistent psychological force: “If it turned out he was homosexual like the men in the *Kinsey Report*, Jester had vowed he would kill himself” (94).

Here, the Kinsey Report operates as a complex node, in which the cultural power of “science”—and the reports’ value as scientific or not—prevents it from appearing as an empty cipher onto which Jester and his grandfather can project their erstwhile fears and passions, and makes it instead as a site that highlights and reveals a longer, value-laden history of scientific reportage and interpretation. This history reveals scientific writing, and the Kinsey Report as an example of it, as already-charged texts and practices that bear on sex, love, object-choice, moral decision-making, and legal determinations. These personal and political concerns inhere not only, but also, in the report and are revealed in circulating determinations of its value as “good” or “bad” science.

In particular, the judge—fabulated as a functionary of the juridico-legal apparatus—offers keen insight into the specific situation of mid-century juridical determinations with regards to science, and in particular, the recursive legitimations and delegitimizations each imposes on the other. *Clock* is set only a few years after J. Robert Oppenheimer’s infamous declaration about the compelling force of science not merely as natural law but also as source of determinism or fate—of both desire and action—that had led him to build the atomic bomb. Oppenheimer’s statement evinced a common public conception of a pure science. This is a science legitimated, deemed as appropriately “objective” (i.e. value-free), and therefore “good,” which exists beyond and therefore modulates law; the law’s weaker capacity for response—to mediate science’s moral force—lies in legal determinations of its appropriate scientificity. These multiple valences of scientific force play out parodically in this scene. The judge keeps the *Kinsey Report* in his law library, but disguised in the dust jacket of *The Decline and Fall of the Roman Empire*, which, unlike the *Kinsey Report*, he has never read but keeps in the law library for show. The potential threat of the *Kinsey Report* for the larger community is best kept in check by the legal representative’s determination of it as “pornography,” hence illegal, and its banishment from the library; the law acts to dismiss and disappear the report as (scientific) knowledge, while simultaneously failing to refute the unquestioned validity and force of science as social and policy determinant.

The particular threat this scene evinces is the already existent and increasing tendency to link *normality*—as a produced statistical figure—to the *desirable* natural. Of course, this feedback loop of the production of the normal, its epistemo-

discursive production as natural, and its validation as morally right (and therefore “normal”) is central to Canguilhem’s analysis of the development of nineteenth-century biomedical science, but it takes on special valence with the rise of the twentieth-century science-legal-policy apparatus, and its increasing deferral to “thin description” (Porter 308). While on the one hand, the Kinsey Report evinced a much wider and more regularly occurring variety of sexual behaviors, on the other, it was caught in much larger debates about the *moral* repercussions of such findings. Interestingly, however, the moral failings were often attributed not to an actual lack of equivalence between the “normal,” “natural,” and “moral,” but more to problems with the method and procedure of the study itself, which drew from an already *criminal(ized)* population—including study subjects who were prisoners and male prostitutes—that exhibited these non-normative, otherwise pathological behaviors. Again, what is remarkable here is that the Kinsey Report’s effects are challenged on *method*, while the more general power, right, and morality of scientific determinations—should they actually reflect the already-constituted normal population—remains virtually unquestioned. Moreover, it emphasizes *the right of the court to dictate and determine, which is to say, socially treat such biological determinations*.

Although such a problem can already be seen in McCullers’s novel, this would come to so thoroughly and intricately imbue the practices of the juridico-legal system, that that it was largely naturalized and seemingly inextricable by the time of Combahee. However, Combahee joins an irruptive legacy of minor science in which McCullers, and before her, Mead, also participate. This history reinvents scientific

practices of experimentation through formal and generic cuttings that intervene against the imposed time of science and its determining capacities. But to understand the radical interventions that McCullers, Combahee, and Mead make, it is necessary first to understand precisely how thoroughly a conception of science as unified and disinterested had permeated national, political, and scientific culture through overwhelming national, corporate, and institutional investment in such a conception between the time of Mead's first research and Combahee's writing.

The Invention of a Unified and Disinterested Science

Little has been written about how science came to be understood as disinterested, or how it was unified and popularized—both in lay and pedagogical imaginations—by “the scientific method.” However, the recent work of a historian of science, Theodore Porter, and education historian, John L. Rudolph, taken together make inroads into this question. As Porter describes it, in the late nineteenth century, discourses surrounding science were almost always linked to moral uplift (Porter 294, 296). The rationality of science would lead to progress, and lead the way out of the irrationality of religion or folk belief. Both U.S. and European governments engaged in large-scale popularization efforts for the sciences. Far from marking a belief in the inherent capacity of science to produce “true” or objective knowledge about the world, these popularization efforts were largely grounded in science's technical value in altering and extracting value from the natural world—

including the production of technologies ranging from navigational tools to industrial machinery. Science's link to moral uplift, backed by government support, helped to cement science's cultural authority and its immediate link to practices of discipline and control. The link between science, moral uplift, and economic extraction then allowed the domesticating value of science to serve as the rationale for a number of colonial and population control projects both abroad and within national borders.

In this period, as "science" began to be divorced from natural philosophy, science was thought of as largely "technical," in the sense that it was *techne*, craft (Porter 293). It required an expertise and skill similar to that of a car mechanic. Training for the sciences, in the small number of US high schools that prepared students for an even smaller number of universities, consisted primarily of technical training and perfection of measuring and observation techniques specific to the field of natural inquiry the student would enter. It was a tedious and repetitive practicum that prepared one to get the same repeated results by proper sensorial attunement to quantitative techniques of physics, chemistry, or biology. It recognized that the standardized scientific perception was not natural, but trained.

By the 1950s, however, science was widely understood to be completely divorced from moral uplift. Instead, that particularly twentieth-century dream science I mentioned earlier emerged, a science that was thought to be "pure," disinterested, and largely inaccessible to the lay-public because of its technicality—now understood in the sense of *expertise* rather than *techne*. The non-scientist could only take the knowledge of the scientist at face-value; and scientists' authority was

enhanced by their perceived “objectivity”—which, as Porter notes, was often nothing more than code for the technical, highly quantitative, and abstruse processes of data interpretation (practices that sociologists and historians of science have done much to show bound up, in their technicity, “with philosophy, labor practices, markets, imperialism, public investment, social administration, insurance, poverty, transport, medical therapeutics, nationalism, imperialism, criminal law, electrification, art, and objectivity” (Porter 297)). Simultaneously, “the scientific method” had become the pervasive pedagogical technique for science education. The scientific method, which (usually) consisted of five simplified steps that had little or nothing to do with the actual practices of experimental science, was promoted as making scientific rationality available to disciplines far beyond the sciences, and imagined to bear on every day problems. This invented, supposedly unified method was the bane of post-war scientists who soundly rejected its applicability to their experimental practice.

Although the two trajectories—the move towards a fully objective science that required expertise, and the move towards a general method that could be applied to daily life—seem oppositional, they actually worked together to instantiate the desirability of a scientific approach in aspects of life that seemed outside science’s traditional purview and reinforce the overall authority of scientific expertise. Simultaneously, what Auguste Comte, father of positivist science, had earlier called “the moral sciences”—and which we today call the social sciences—benefited in terms of authority from the scientific method’s unification of technical fields. The social sciences—as they were professionalized throughout the first half

of the twentieth century—became increasingly technical, quantitative, and for those reasons, seemingly objective, built on empirical observation and its quantitative extrapolations. Tracing this change can help us understand more about not only the particular ways into which data about people was made into “objective” description, but also the ways in which people, as they became more available to quantification, became differently available to moralism coded as scientific and determined fact. Interestingly, and a point to which I will return, certain practices of identity politics have depended on the very categories and strategies of the social sciences, which, when understood as fixed rather than strategically produced, have placed strong limits on their political capacities.

In the twentieth century, empiricism—understood as the basis of scientific inquiry—no longer centered on the philosophical questions that marked its emergence. Perhaps most importantly, empiricism no longer had to ask or answer questions about how perceptions could become available to thought or about the relay between belief and knowledge. Historically, empiricism, according to its canonical reading, asserts that all possible knowledge comes from sense perception, but does not guarantee the possibility of knowledge at all. Experience produces impressions, but its translation into knowledge depends on a practice of associations and their correction through the imaginative faculties in order to verify and codify sense perception. Empiricism in the philosophical sense—especially as it comes out of David Hume’s radical skepticism—offers relations, habit, and

induction, as the primary grounds for organizing and interacting with the world.²⁰

In the 1950s, Deleuze augmented or offered an alternative reading of Hume, which argued that at its emergence, empiricism was primarily a question not of how knowledge might emerge (or if it could), but rather about how subjectivity is constituted; subjectivity, then, made belief the constitutive grounds of the possibility of knowledge. But by the twentieth century, empiricism was largely understood in opposition to both belief and/as subjectivity—it was understood to be the source of transparent knowledge about the world, and knowledge held greater value than belief, enabling surety about the morality of scientific-cum-imperial projects. Knowledge about the natural world was coextensive with the natural world itself—or close enough that any subjective mediation could be corrected through data. The facticity of nature—including human experience—enabled a narrative of inevitability that would supplant choice as the grounds moral decision-making.

This change can be understood, at least in a simplified sense, as the result of the influence of positivism, which—as it is usually understood today—holds that information derived from the senses and the mathematical analysis of sensorial experience offer the only source of authoritative knowledge about the world.²¹ To produce authoritative knowledge about the world means to transform the flows of life and the synaesthetic perception of them into separable data points. While almost nothing in the world is *given* as (pre-coded) data, empirical research today

²⁰ See: David Hume, *An Enquiry Concerning Human Understanding* (Indianapolis, IN: Hackett Publishing, 1993).

²¹ See: Loic Wacquant, "Positivism," in *The Blackwell Dictionary of Twentieth-Century Social Thought* (Malden, MA: Blackwell Publishing, 1992).

means primarily turning all the world into data, and imagining that such data gives itself readily and transparently to “information,” or what Theodore Porter calls “thin description.” “Scientific knowledge,” he writes, “is idealized as *information*, which renders craft invisible. [...] Information means knowledge that is ready-made for deployment by anybody, requiring no interpretation.” This idealization of “thin description” helps to generate “the ‘information society’ [that] is practically synonymous with modernity” (Porter 307-8). Today, scientific findings are often understood—by the lay public, policy-makers, and some scientists—not in relation to radical skepticism, or even the falsifiability model, but to positivism: as authoritative information readily, transparently, factually given about the world. This understanding of the world as information erases any relation within empiricism between experience and experimentation, between subjectivity and an encounter with the world.

Porter highlights that this new understanding of science as objective and disinterested was crystalized when it became possible for J. Robert Oppenheimer in 1954 to dismiss any moral objections he had about the potential *use* of the atomic bomb, claiming instead that “the design [...] was so ‘technically sweet’ that, for a physicist, it had become compelling” (Porter 292). The technical aspects of the physics problem—and the delimited aesthetic “sweetness” of solving it—were matters of concern for Oppenheimer; politics—or the use of the science he was involved in developing—was beyond his purview. Porter suggests that “this confinement of the scientists *qua* scientist to the domain of technicality is one of the signal features in the modern cultural history of science” (293). Science became

understood as “technical,” and “technical” became code for objectivity; but such was largely a result of the obscurantism of the knowledge produced and the deeply embedded bias—residing in the categories themselves or underlying assumptions of empiricist practice—rather than any actual objectivity or disinterest.

Simultaneously, and seemingly paradoxically, “the scientific method,” as it had been popularized and implemented pedagogically, made it seem as though *everything* were the purview of science; or, rather, any problem—from the simplest decisions about what to buy at the grocery store to more complex ones such as how to deal with racial strife and economic inequity—could be solved through the steps attributed to scientific experimentation. The popular idea of a *method* of empirical practice and the authoritative appeal of “technicality” as a scientific ideal became, as Porter notes, “a beacon for social science, whose leaders eagerly took up the quantitative technologies worked out by statisticians [...] to situate themselves as unbiased experts, detached rhetorically from the fray of ideology and politics” (306).

Enter a powerful series of supposedly objective and explanatory studies immediately mobilized for political ends, including the Kinsey Report and the Moynihan Report.²² In fact, by the time of Combahee’s writing, the emphasis on “science” as a means to (and exemplar of the value of) rationality, logic, knowledge and decision-making in all aspects of education—including, often, the humanities, which also became the site of problem solving through structural determinations, in addition to the “hard” and social sciences—had already been naturalized in

²² As Kevin Mumford notes, Moynihan’s relationship to the report was more complex and well aware of its political stakes, but the report’s enduring power was in its supposed scientificity.

pedagogical practice for several decades. This was an effect of an early-century mass education reform movement centered on what John Dewey articulated at “the scientific method” and on University educators’ emphasis on “science” as the “heart” of elite education, which trickled down to secondary schools. In the early twentieth century, as the number of students enrolled in high schools rose dramatically, the former practices of preparation for university science education—which had been largely technical (*techne*), involving repeated laboratory procedures for practicing measurements for specific scientific disciplines—were no longer economically feasible given the larger class sizes (Rudolph 354). Because science was increasingly emphasized as the central feature of education for its more “rational” approach to knowledge and its practical (which is to say economic) utility, another less technical, inexpensive, and group-friendly form of preparation was necessary. “New Psychology,” which was focused on education and childhood development, offered solutions (358).

The New Psychology operated in a recursive fashion, extrapolating on ideas from evolutionary theory and the biological sciences, developing its own “scientific” practices along with other emergent social sciences, and offering expertise to design pedagogy for the humanities and sciences; unsurprisingly, then, its educational techniques emphasized a “scientific” approach to learning. John Dewey, one of the New Psychologists, was quick to transform the “laboratory method” of tedious practicum into an intellectual exercise in process. In his 1910 book, *How We Think*, Dewey “laid out the familiar steps of what became the popular view of the scientific method and contributed to the redefinition of science as an everyday problem

solving activity” (344). This meant that students need not depend on access to equipment, and also that the “steps” Dewey associated with science would make their way into other aspects of the curriculum in order to make scientized knowledge available about and for all aspects of human experience.

The idea that scientific practice consisted of five steps: “(i) a felt difficulty; (ii) its location and definition; (iii) suggestion of possible solutions, (iv) development by reasoning of the bearings of the suggestion; [and] (v) further observation and experimentation leading to its acceptance or rejection” quickly became the popular conception of science and the anathema of practicing scientists (366).²³ By 1945, the perception of science as consisting of *this* method was so widespread that Harvard issued a report on General education, in which it was stated (in order to correct popular opinion), “Nothing could be more stultifying and, perhaps more important, nothing is further from the procedure of the scientist [...] than a rigorous tabular progression through the supposed ‘steps’ of the scientific method” (342). Several years later, Vannevar Bush, US research director throughout WWII, stated in no uncertain terms that it is “crystal clear that there is no such thing as the scientific method” (342).

The results of the prominence of these competing conceptions of science—one that it was technical and beyond the reach of everyday political or personal

²³ Today, those five steps are usually translated into science textbooks as: 1. Ask a question, 2. Do background research, 3. Construct a hypothesis, 4. Test your hypothesis by doing an experiment, 5. Analyze your data and draw a conclusion. To that, a sixth (and professionalizing) step is usually added: 6. Communicate/publish your results. Often, the *publishing* practices of the sciences and social sciences require sections organized in ways that resemble this supposedly unified method: 1. Introduction, 2. Literature Review, 3. Method, 4. Results, and 5. Discussion.

concerns, and the other that it was the best method for making decisions in daily life by virtue of its rationality—seemed to coexist in the popular imagination in an easy fashion throughout the twentieth century, creating the unified perception that made it possible to even name “science” a single field. In fact, the supposed objectivity of data and of empirical testing has become precisely the source of scientific research’s hidden or coded moral imperative—whether in large-scale national politics or daily life. As Porter notes:

Ironically, the [scientist’s] pose of disengagement has become one of the key supports for the authority of science in regard to practical, contested decisions about public investment, medicine, public health, and environmental questions. And this objectivity works most effectively not at times of open political contestation, but when the experts act as cogs in the machinery of bureaucratic action, advising administrators rather than appealing to an engaged public. (305)

Undoubtedly, one of the more problematic results of this dual perception of science was the increased authority of supposedly scientific knowledge about the taxonomies of race and sexuality. The supposed transparency of the data contained in, say, the Moynihan Report or the Kinsey Report—if accepted as scientifically viable—could lead to medical and political policy. But these policies tended to reinforce structural inequalities or cultural biases as though their *explanations* for and interpretations of data were biologically given. The interpretive structures—and the aesthetic delimitations that had gone into the development of scientific analytics—were made invisible, seemingly immutable, and the transparent information produced from such studies were readily applied to the populations they purported to describe, reinforcing the oppressive status quo.

“Science”—at least of this particular empirical and positivist bent—became the central method for political decision making not despite its imagined distance from interest and politics, but precisely because of it. Today:

Many difficult scientific questions, such as the proper definition of a species or the threshold of carcinogenic risk for a chemical, come very close to dictating policy outcomes. The political process itself demands the authority of objectivity on many matters, and so science presses, and is pressed, relentlessly outward. [...] The divide between technical science and political opinion is highly unstable. The currents of science and technology overflow everywhere the boundary between ought and is. (308)

But what is crucial to note here is that such a perception of science and the increased authority of scientific knowledge to double as supposedly transparent moral prescription in matters legal and political—erasing that knowledge’s aesthetic and political underpinnings—is not a mere product of some social Geist. By bringing Porter’s analysis of the increased technicality and “objectivity” of science into conversation with Rudolph’s history of US science pedagogy, we can see that it is, rather, the direct result of the relays between massive school reforms organized by psychologists who were themselves beholden to the knowledge science had given them about development, and to increased funding for the sciences from corporate and military sources that mobilized scientific authority and its economic prospects to recruit students as labor sources. The school as a training site for proper citizen-subjects took on the role of enforcer of a national (white, masculinist) and universalizing bildungsroman. This helped to erase a sense of the value of attributing to personal interest, felt experience, aesthetic interpretation, or politics the very possibility of the construction of scientific knowledge, while simultaneously

taking the values produced by science as objectively given, allowing its knowledge to construct or enforce the systems that would attempt to govern, correct, and control the personal, experiential, aesthetic, and political. Science, then, recursively proved, empirically, that white men were the ideal citizen-subjects.

Margaret Mead and a Feminist Empiricism

The politics that inhere in science's explanation of the world were all but erased by post-war scientists and early twentieth-century pedagogues, who largely succeeded in making the political dimensions invisible by presenting science not as the result of a particular set of aesthetic determinations, but as a disinterested description of a world given readily and transparently as data-information. It is precisely this inherent politics—which names the excessive field from which a scientific explanation has been cut and produced—that Combahee leveraged in their production of a minor empiricism, an invested science. Here, it is important to note that, for Combahee, their revolutionary science is only possible from underneath; it is produced by those who experience the personal and political effects of civic disinvestment in their daily lives.

The penultimate line to Combahee's Statement is a quote taken from Robin Morgan's *Sisterhood Is Powerful* (in which Morgan coined the term "herstory"); Morgan writes, "I haven't the faintest notion what possible revolutionary role white heterosexual men could fulfill, since they are the very embodiment of reactionary-vested-interest-power" (Combahee 22). Although Combahee does not comment on

the quote, making it difficult to tell if they, like Morgan, cannot imagine a revolutionary role for white, heterosexual men, they do assert what appears to be, for them, the contrapositive of Morgan's statement: "As black feminists and lesbians, we know that we have a very definite revolutionary task to perform" (22). They affirm their belief that, being positioned against "reactionary-vested-interest-power," their revolutionary task is immanent to their social situation and emerges from their own interests and needs. Their project, then, begins from an autonomously generated, self-determined claim to their own value. This marks a powerful departure from the presuppositions and determinations of institutional science and its public perception. Indeed, their invested science requires—against the authority of the supposedly value-free objectivity of contemporary empiricism—insisting on the value of valuation itself, value that is always personally and socially produced, and that has effects that are complex, undetermined, and not fully rational. The effects of any value determination are the products of a long chain that originates in choice and the establishment of a frame in which to compose. This frame can only be composed through a disorganization of the frame as apparently given, and such reorganization, triggered by new sensorial arrangements, also begins in choice, belief, position, and interest, but now affirmed as valuable rather than erased.

A similar position with regards to science and its utility had been adopted almost half a century earlier by Margaret Mead. However, her tactics would necessarily differ from Combahee's, as her particular social situation—as a middle-class white girl-then-woman in the 1920s and '30s—differed. The concerns of minor

empiricism, which both produces and is produced by subjectivity, can, according to Deleuze, only be “correctly raised at the level of practice,” which is grounded in a particular subjective situation; it “cannot be dissociated from the imperatives of experimentation and struggle,” which mark a specific situational problem.

Mead is an especially useful figure for understanding the relations at work in this chapter, because she worked in the very scientific field that Spillers named as helping to produce the pathologization of otherness: anthropology. Mead, however, occupies a strange position that makes it difficult to place her squarely in the lineage of “primitivist” anthropology that came out of a research-based practice that characterized the work of early American armchair anthropologists. Mead, a student of Franz Boas, was part of a new generation of field anthropologists, and one of the first women anthropologists. Her first book, *Coming of Age in Samoa* (1928), although it depended on the language of primitivism, departed in many ways from an understanding of non-Western cultures as being temporally frozen in the past. Mead’s text, written in a fledgling period of American anthropology and growing scientific authority, made a claim to more fully and systematically scientize the discipline’s research practices through the concept of experimentation (rather than research). However, her work also precedes the moment of fully institutionalized and increasingly corporatized and militarized science, which allowed her to experiment with a different way of *being scientific*, one that emerged from her own experience of oppression as a woman in early twentieth-century US culture. Her way of being scientific offers a descriptive practice that we might say is a valuable experiment that constitutes a feminist and/as minor science.

Indeed, Mead, following soon on the heels of the moral uplift tradition and not fully indoctrinated in a conception of “objective” science, posits an experiment that temporarily reverses the trajectory of disinterest. She suggests not that science should dictate politics because it unveils the natural, but instead, that political situations determine the expressions of the capacities of human nature, and by beginning from the problem of a political situation, one might see if and how different situations produced different natures. Human nature, for Mead, is not natural; it names a capacity and a set of possible actualizations. Her science, then, begins from the specific problem of being a *woman*, and previously a girl, as both had been constructed by US culture and (de)valued by the culture of science, which would dismiss the empirical value of her felt experience.

Although there is no direct historical relationship between Mead and Combahee, it is interesting to note that shortly after Combahee’s rejection of biological determinism (they claimed in their 1977 statement, they, as Black women found “a particularly dangerous and reactionary basis upon which to build a politic” (17)) the US would enter a cultural wave of increased investment in biological determinism, and, as part of that wave, Mead came under renewed national interest and scrutiny precisely for the aspects of her position that bore much in common with Combahee’s. In the 1980s, Mead—who had died a few years earlier—and *Coming of Age* were the subjects of a vicious series of attacks by Australian anthropologist Derek Freeman. Freeman first disputed the accuracy of Mead’s work, claiming that she had been duped by native informants, but he would later go on to say that she had “hoaxed” all of anthropology and diminished its status *as a science*,

by generating conclusions that could not be properly falsified and writing a book motivated purely by her own political interests (Shankman 97). Unsurprisingly, given the timing of the attacks, Freeman was part of a growing group of biological essentialists, who, in the 1980s, eschewed the more mixed nature/nurture interpretations that had pervaded anthropology in the 1970s, and returned again to fixed biological categories, only this time, they were less overtly those relating to phenotype, but, via increased technoscience capacities, were instead masked as genes, chromosomes, and brain structuration. Freeman's attacks received surprisingly wide coverage in the popular press, even showing up on the cover of the *New York Times*, and Freeman himself appeared on many US talk shows, including the top-rated daytime talk show, *Donahue* (Shankman 32).

In order to both increase his own authority and erase the historical specificity of Mead's work, written more than half a century earlier, Freeman laid claim to his own position as a *scientist*. To confirm this status, he launched into an on-air discussion of the (quite conservative and outdated) philosopher of science, Karl Popper.²⁴ Referring to Popper's famous claim that the defining feature of scientific practice is its recourse to falsifiability, Freeman went on to claim that he was a scientist because he *practiced the scientific method* and adopted a disinterested position with regards to his subjects. While there is much in the literature about Freeman to suggest that he was both highly interested and politically motivated, one

²⁴ See Chapter 1 for a longer discussion of Popper. In his classic account of how science works, he argues that theoreticians determine the problems that experimentalists test, and experimentalists as best can falsify, but never fully confirm, the given theory.

can't help but be struck by his insistence on his own disinterest, his investment in biological science as the full grammar of human social interactions, and his methodological fidelity to "science" (a claim that, again, a practicing experimentalist only thirty years earlier would have been loathe to make)—an insistence that appears especially masculinist in its attack on Mead and his dismissal of feminist injunctions to knowledge structures that would value the personal as political, and, in Mead's case, the personal as scientific. Freeman's insistence highlights the degree to which he understood anthropology as credible only when it was *empirical* in the mid-century sense: supposedly divested of the desires of the researcher, the political implications of the researcher's presence, or the aesthetic and structural constructions that organized ethnographic work. For Freeman, Mead served as the origin of contemporary anthropology, and the origin determined the possibilities that would follow. Mead's greatest crime—and the ruination of anthropology that ensued in her ethnography's wake—was her failure to be properly scientific, according to the scientific method.

The public controversy surrounding Mead's work spoke little to the perception of her work within the field of anthropology. By the time of Freeman's writing, she was generally considered one of several significant founders whose "methods" were under development in her own moment and continually augmented by those who came after. Few if any anthropologists would see her as a sole origin and originary problem of anthropology that in some way fully determined the future of the field. Despite this, as Paul Shankman notes in his account of events, which he gives in his book, *The Trashing of Margaret Mead: Anatomy of an Anthropological*

Controversy, Freeman's perceptions of Mead and their mass dissemination resulted in a lasting public perception of Mead as a "bad" scientist, and her work as pseudo-science. Yet, I suggest that if we return to the moment of Mead's own writing, we find that she, in fact, evinced a much more nuanced understanding of what it meant to be scientific by way of experimentation than did those who followed the simplified model presented by Popper and espoused by Freeman. In fact, her understanding of experimentalism is actually much more closely in line with the description of experimental conditions and "valuable experiments" I extracted from Hans-Jörg Rheinberger and Ludwik Fleck in the first chapter of this dissertation. Fleck and Rheinberger both assert the importance of the desire, mood, and theoretical disposition of the experimentalist in determining what she might see or observe—conditions grounded in the experimentalists own lived situation. The experiments they are most interested in, "valuable experiments," unlike the ones in which Popper is interested, do not merely falsify or corroborate a theory but in fact, encounter explanatory impasses that disrupt any established experimental parameters, and require new descriptive practices.

In the introduction to *Coming of Age*, Mead makes the surprising claim that the ultimate purpose of her book is not, in fact, to provide an account of Samoan girlhood. Her ethnography, she states, is instead a scientific experiment intended to supplement the findings of the growing field of developmental psychology—which described adolescence as a tumultuous period marked by "rebellion against authority, philosophical perplexities, the flowering of idealism, conflict and struggle"—by investigating the question: "Were these difficulties due to being an

adolescent or to being an adolescent *in America*?” (Mead 6, emphasis mine). Mead suggests that one of the most pressing dictates of early twentieth-century American society—as evinced by “the fulminations of the pulpit, the loudly voiced laments of the conservative social philosopher, the records of juvenile courts and social agencies”—is that “something must be done with the period which science has named adolescence” (3). Mead lauds the New Psychology for making it possible to “take seriously the needs of the child” by bringing adolescence under the auspices of scientific inquiry, but suggests that the complexities of US culture place severe limits on the psychological sciences’ capacity to isolate variables and conduct a proper experiment.

Already, science is the marker of serious knowledge, but in Mead’s view, the cultural complexity of the US—and in particular its ethnic complexity—is not appropriate to the scientific dictates of experimentalism. “The ideal methods of experiment,” she states, “are denied to us when our materials are humanity, and the whole fabric of social order” (7). According to Mead, it is the inability of a scientist—the “cautious experimentalist”—to properly account for all the structural and experiential features of development that has enabled lay-people to promote the widespread conception that adolescence is *naturally* fraught. But Mead, dissatisfied with such an interpretation, asks: “What method then is open to us who wish to conduct a human experiment but who lack the power either to construct the experimental conditions or to find controlled examples of those conditions here and there throughout our own civilization?” (7). Mead’s answer to this question is to produce an ethnography—which she calls an “experiment”—with a “primitive

culture” for whom the multiple competing cultures and ideologies that comprise US social life are not present, enabling the isolation of particular features of adolescence for an experiment. Ethnography, she states, can provide the “controlled examples of those conditions here and there throughout our own civilization” necessary for conducting an experiment that will clarify these convoluted questions about *American* society, which deals with the intersections and competing interests of many cultures.

Mead’s text insists on its status as experimental science by using the familiar language of proper controls and laboratory conditions while simultaneously presenting a view of science that is quite foreign to its popular understanding today: for Mead, science—and especially the new science (or newly scientized), psychology—is bound up in social formations and, at its best, ask questions that help one to understand and intervene in oppressive political conditions; it in fact emerges from a political problem. For Mead, who was only a few years out of adolescence at time of *Coming of Age*’s publication, science is inherently political, and her scientific inquiry is aimed specifically at addressing the very conditions that had oppressed and continued to oppress her, and which could only be addressed by studying adolescents. Late nineteenth century popularization campaigns that had linked science to moral uplift still held sway, which made Mead’s suggestion that science might be linked to social change less surprising. But it was quite shocking that she would suggest that such social change might be directed at *American* society rather than the so-called “primitive” people she described.

For Mead, as with Combahee and McCullers, her capacity to make political claims under the purview of a science that tended to make strong, taxonomic distinctions between people and erase their undetermined relationality depended on a reorganization of the time of anthropology. Mead lays out the questions of her experiment in the introduction and final two chapters of the book, which bookend an account of the life of Samoan girls that otherwise bears little mention of American society. But far from subscribing to a more accepted convention of describing “primitive” people as frozen in a prior time—an imagined past that precedes American culture and describes an origin from which Europeans have long since evolved—Mead describes the Samoans as having “thousands of years of historical development along completely different lines than our own” (Mead 8). And, like McCullers and Combahee, Mead enacts her disruption of anthropological time through generic disruption. Mead not only disrupts the form of the ethnography, which was generally presented in the dry and “heavy German style” of James Frazer (Shankman 103),²⁵ but perhaps more interestingly, she draws on the form of the *romance* or sentimental novel and its subgenre of the female bildungsroman. In her use of the conventions of the sentimental novel, however, she eliminates both the element that would make a white middle-class female readership most easily identify with it—a white female heroine—and also eliminates the moralizing narrative of development into a proper and tamed wife, thus subverting the function of the popular women’s novel as well.

²⁵ See: James Frazer, *The Golden Bough: A Study in Comparative Religion* (Cambridge, UK: Cambridge Univ. Press, 2012).

Recent studies of generic women's writing and their readerships have lauded the capacity of these novels to produce communities of women readers. However, they have also suggested that the affective compensations provided by these texts depoliticize the experience of women. Janice Radway, for example, writing in 1989 about late twentieth-century romance novels in *Reading the Romance: Women, Patriarchy, and Popular Literature*, argues that contemporary romance novels produce communities of women readers who use the novels to fulfill their own desires for caretaking, which they often give but rarely receive.²⁶ Although Radway is discussing the popular genre that appears in mass-produced paperbacks much later than the time of Mead's writing, her conclusions are similar to those of Lauren Berlant, who, writing about early- and mid-twentieth-century sentimental novels in *The Female Complaint: The Unfinished Business of Sentimentality in American Culture*, suggests that the intimate publics produced by the readers of the novels, and their escapism through the generic tales, provide an affective panacea that inhibits female readers from making *political* claims that might otherwise become apparent through their affective dissatisfactions.²⁷

Often, the female bildungsroman is described as a subgenre of the sentimental novel because it uses a mode that "imitate[s] feeling rather than intellect" (Braudy 5), but it distinguishes itself from other manifestations of the genre by doing so in the service of depicting a coming-of-age that models the moral

²⁶See: Radway, *Reading the Romance*, in particular the final two chapters, "Failed Romance: Too Close to the Problems of Patriarchy," and "Language and Narrative Discourse: The Ideology of Female Identity."

²⁷See: Berlant, *The Female Complaint*, in particular, the introduction and chapter four, "Uncle Sam Needs a Wife: Citizenship and Denegation."

passage of a girl into adulthood. This distinction, which names the female bildungsroman as separate from the larger conventions of bildung not only because of the gender of its central character, but also because of the mode—which is that of sympathy rather than intellect or action—marks the degree to which the traditional bildungsroman, as training for proper citizen-subject(ivity), is a masculine form and the only possible citizen-subject male. Rather than entering civic life, the female protagonists of the female bildungsroman—a genre usually thought to begin with writers such as Jane Austen and Charlotte Bronte—is educated into social propriety, tamed through sympathy into a maternal figure who finds fulfillment as a wife, and generates social reform through the extensions of her maternal sympathy.²⁸ Mead's *style* and the content of her work, as well as her intended readership, mirror those of the sentimental bildungsroman—painting intimate, quotidian scenes that focus on the social development and romantic experiences of girls and women—but break soundly from their effects, most explicitly, the depoliticizing ones. She does so through a tactic of formal parataxis that rejects the normalizing narratives of female coming of age, by demonstrating that far from natural they are socially constructed and socially useful. Indeed, no bildungsroman is necessary for the Samoan girl (in Mead's telling of it), because she experiences a freeing “absence of any important institutionalized role in the community,” which alleviates the necessity of bearing on her body the demands of purity/impurity, virginity/sexuality required of US girls (Mead 111).

²⁸ See: Laura Sue Fuderer, *The Female Bildungsroman in English: An Annotated Bibliography of Criticism* (Modern Language Association of America, 1991).

As Mead notes in her Preface to the 1973 edition of *Coming of Age*, her ethnography, while not written “as a popular book,” was written in order to be read by lay readers, by “those who had the most to do with adolescents—teachers, parents, and soon-to-be parents” (Mead xxiv). It was, she writes, “the first piece of anthropological fieldwork which was written without the paraphernalia of scholarship designed to mystify the lay reader and confound one’s colleagues.” Although intended as a scientific account, Mead makes clear that she eschews the obscurantist practices of much science writing, and indeed, her ideal reader is not a scientist or academic. For the Perennial Classics edition of the book, the psychologist Mary Pipher wrote in her foreword that “the reader whom Mead imagined as she wrote was her grandmother, an intelligent schoolteacher” (xvii). Although Mead does not state so explicitly, it is clear that because her book is not about adolescence in general, but *female adolescence* in particular, at least part of her intention is to be read by *women* who have been or who have daughters who will be affected by the very conditions she seeks to address.

Her prose reflects these concerns by taking on a decidedly “literary”—and we might take this to mean “romantic” or “sentimental”—quality that was the bane of many of her academic readers. Indeed, her style, which she called “literate English,” would be “later dubbed ‘the wind rustling through the palm trees’ school of ethnographic writing” (Shankman 102). As anthropologist Maureen Mollow later said, “[Mead’s] conflation of modes of science, literature, and journalism was a reason for both her popular success and the ambivalence [...] with which many of her professional colleagues regarded her work” (115). Far from “conflating” those

modes, however, Mead seems to cut and break between them in order to present familiar themes while defamiliarize their presentation, cutting scientific assumptions with changes in aesthetic form and juxtaposing generic literary conventions with overt, almost manifesto-like political claims. In a moment in which “there were very few studies on adolescence in other cultures and no models for writing up this kind of a field study,” Mead invents a form that highlights the multiple valences of experimentation that are played out both in her emergent practice of study (as an early participant-observer) and in her grappling for an aesthetic form that can embody the multiple aspects that she sees as central to her scientific practice.²⁹

As Shankman notes, many passages of *Coming of Age* are written in a “lyrical and idyllic manner” (102). Famously, the first chapter, “A Day in Samoa,” waxes especially poetic, florid even, expressed from the point of view of a seemingly omniscient narrator that surrounds the reader with the scene, with the island. It begins:

The life of the day beings at dawn, or if the moon has shown until daylight, the shouts of the young men may be heard before dawn from

²⁹ Although it may be tempting to dismiss Mead’s work as “bad” or “pseudo-science,” disproven by more rigorous or changing scientific practices that followed, in its historical moment, Mead was indeed practicing “science.” It has become habit to dismiss science with clear ill-effects—including, say, Nazi eugenics or nineteenth century race-science—as pseudo-science, yet it is clear that the practitioners were practicing science (often as their profession) which is not a unified field, but instead has multiple valences and practices that were invented or externally imposed in the process of their practice. Revising history to police those borders makes of science a unified progress narrative, and erases the ethical and moral implications *always internal* to science, making it appear that “good” or well-done science will always have positive moral effects, while the ethical and political effects of non-science posing as science are less predictable.

the hillside. Uneasy in the night, populous with ghosts, they shout lustily to one another as they hasten with their work. As the dawn begins to fall among the soft brown roofs and the slender palm trees stand out against a colorless, gleaming sea, lovers slip home from trysts beneath the palm trees or in the shadow of beached canoes, that the light may find each sleeper in the appointed place. (Mead 12)

The first chapter demonstrates the appropriateness of the “wind rustling through the palm trees” moniker, but rather than using the phrase derisively, I suggest that the style serves not merely a generic and commercial literary purpose, but also scientific and political ones. In the paradise Mead paints, lovers, trysts, and homosexual-social behavior appear as natural and beautiful—spectacularly unspectacular—parts of the landscape.

The text will go on to tell the tale of the growth and development of adolescent girls into early adulthood on the island, focusing primarily on the life and love affairs of two (Moana and Sila), and it will further break from the conventions of academic ethnography by relying heavily on affective and personalized anecdotes about the girls lives in order to generate an *experience* for the reader that tends towards identification through sentiment. But from the very first pages, Mead adopts a non-moralizing standpoint that positions her as both external to Samoan society and internal to and self-reflexive about the experimental system that she studies. In doing so, part of the experimental practice is analyzing her data “in a Samoan context,” which is to say, describing it via its own moral standards as she understands them (Shankman 106). From this perspective, she tells of development and love, which would normally be characteristic of the sentimental bildungsroman, but rather than presenting a character similar to her reader experiencing trials and

tribulations that might be familiar to her and modeling a proper negotiation of them, she presents the Samoan girl as different, more socially advanced, and psychologically stable than American women. Samoan girls, as Mead presents them, recognize love “as an impersonal force,” and are able to “experiment freely,” while not letting love, sex, and coupling determine their entire social being, either as a mark of shame or as the telos of adulthood (Mead 111).

In doing so, Mead alters anthropological time as it was usually presented, instead, writing Samoan girls as “remarkably modern,” which she confirmed as her impression of them in a letter to a colleague during the course of her research (quoted in Shankman 105). Far from being frozen and prior in time, in Mead’s vision, Samoan girls are able to claim the very freedoms that she imagines as the purview and desire of women’s sexual revolution in the US at her own moment: “sex with less commitment, with more than one partner, and with partners of more than one gender,” as well as “the absence of romantic love and violent jealousy.” Here, the tendency of ethnography to look to a reconstructed past—which anthropologists like Lewis Henry Morgan had presented as a utopian fantasy for social return or restoration, both ideal and impossible—is cut by a temporal collapse that places both Samoa and the US in a constantly unfolding present, demanding new relations to past and future. Samoan girls, as Mead presents them in the final chapter, “The Girl in Conflict,” are now having to struggle with and through US mores that impose a Christian morality through the missionary school systems, at the same moment that US women are struggling to free themselves from the indoctrinations of proper, feminine coming-of-age, and trying to gain the freedoms that Samoan girls and

women have. However, contrary to much criticism of her book, Mead doesn't paint Samoa as purely idyllic—there is still rape, aggression, and different forms of sexual restrictiveness, but those are not presented as fully determining the lives of women.

Although Mead's work is deservedly criticized for constructing rather than documenting the lives of Samoan women—perhaps even primarily fabulating those lives—she highlights and mobilizes that fact, using her subjective position as the grounds of her experiment. For Mead, the valuable experiment emerges from a subjective position, and at its best makes use of what Deleuze and Guattari will later call the “friend” to science: “the partial observer,” which is “perfectly positive and creative” (Deleuze and Guattari, *Philosophy* 129). This experiment is enacted through her writing, which anticipates an American audience. Here, although Mead's introduction and final two chapters call for education reform in the US, thus following a certain reformist pattern that Ann Douglas, in *The Feminization of American Culture* (1977) would describe as characteristic of the sentimental women's novel, Mead does so in a way that does not follow the exact grain of the “sentimental novel” portions of her text. Those sections, which present the lives of Samoan girls, are not intended to model potential lives for American girls, for whom the life situation is different.³⁰ Mead's reconfiguration of the sentimental novel—which uses its conventions in order to be decidedly *unsentimental* about love—inverts the mimetic-didactic function of the sentimental novel, which in the traditional form would both depict a representative and recognizable female

³⁰ See: Ann Douglas, *The Feminization of American Culture* (New York, NY: Farrar, Strauss, Giroux, 1998).

heroine, and use her character as a model to be mimicked for personal and social reform outside the novel. Mead instead overtly produces *difference* between her reader and her depicted characters or studies—a difference that is important to remember is, for Mead, social rather than biological, contextual rather than inherent, but still *real*. This production *externalizes* the relations between the two terms rather than collapsing them and making of the ethnography an escapist fantasy. Mead's practice, then, is in concert with minor empiricism, of which Deleuze suggests *the externality of relations* is the central feature. The girls do not represent alternative formations for American girls, but offer a point of disjuncture and relation; "representations," Deleuze writes, "cannot present relations," which are external to their terms, constructions, rather than the province of mimesis (Deleuze, *Empiricism* 30).

In using sentimental form to present Samoan girlhood as modern, Mead is able to collapse the imposed progressive time of anthropology, and put Samoan girlhood into parataxis with US girlhood, but without using one to prescribe the other or represent the ideal form of the other. Mead did make a direct appeal to education reform in the US in the final chapters, but this reform is a possibility signaled by an encounter with difference rather than prescribed as an appropriation of it. She writes:

The strongest light will fall on the ways in which Samoan education, in its broadest sense, differs from our own. And from this contrast, we may be able to turn, made newly and vividly self-conscious and self-critical, to judge anew and perhaps fashion differently the education we give our children. (Mead 11)

Her experiment, then, consists primarily in maintaining difference as the grounds for encountering US (female, white, upper/middle class) subjectivity, and examining its construction and reforming the ideological enforcement of one version of it as though such a version—that of tumultuousness in need of strict moralism and taming—were given. She produces the experience of difference as associative through writing, making an experiment not only for herself but also for her reader.

Here, although it may seem as though we should make a distinction between the practice of science and its writing—with one making scientific determinations and the other merely reporting them—as Latour and Woolgar make clear (and as I discuss in greater length in chapter 2), the writing of science is one of the central aspects of scientific practice. It is through writing that the scientist is charged with producing what Latour and Woolgar call an “ordered account out of apparent chaos” (Latour and Woolgar 33). Contending with the (positivist) empirical presumption that the world is given as ordered, the scientist, in the writing portion of an experimental practice, “is faced with the task of producing an ordered version of observations and utterances” (Latour and Woolgar 33). Mead’s own attention to her writing—and perhaps moreso, to the transitions she makes from an initial report to the book version of *Coming of Age*—helps highlight the degree to which the writing is itself part of the experiment, one that is not fully determined or given by the observations of the experimenter, but which is constituted in the process of its being written and re-written. Experience, then, and the doubling of or re-experiencing of experience become central. What Mead first wrote as notes in the dry style of science reportage is re-written *as an experiment* “through the lens of her experience

while anticipating the audience she hoped to reach” (Shankman 105). Indeed, writing is central to if not the entire condition of her experimental practice.

Her valuable experiments, like those described by Ludwik Fleck, move from initial and vague perceptions of unexpected phenomena—which is to say, of a culture she observes which presents quite different mores than she expects—which she records in her initial journals to the production of an experimental system that mobilizes literary form (scientific, sentimental, anecdotal, journalistic, and political) that can become what Hans-Jörg Rheinberger described as “a vehicle for materializing questions” (Rheinberger 28).³¹ Indeed, in a move that is quite self-reflexive about scientific practice, and evinces what Rheinberger would later from a sociological perspective say of experiments, Mead describes her experiment as that of *arbitrary isolation* of a segment of the world to be studied (the experimental system), but in a way that does not then imagine her experimental system to fully constitute or represent that which is beyond its arbitrarily defined borders. Reconceiving of Mead’s conversion of her observations about Samoan society, made within the parameters of somewhat arbitrary isolation from which to begin her thought, as a vehicle for materializing questions about American society that is made through the production of an external relation that maintains difference helps to demonstrate how her empiricist project departs from the twentieth-century version of empiricism—especially as it appears in technoscience—aimed at making determinations and solving problems.

³¹ See Chapter 1 for a longer discussion of Fleck’s and Rheinberger’s description of valuable experimentation.

This brings her practice even more clearly in line with the disruptive and unresolving strain of empiricism described by Deleuze in his radical, minor reading of Hume. As Constantin Boudas puts it in the introduction to the English translation of *Empiricism and Subjectivity*, for Deleuze, empiricism “has little to do with purported solutions or answers and everything to do with the question and the problem, or the ability of the problem to coordinate and serialize other questions within its range of tonalities” (Deleuze 5). Empiricism, far from taking experience as given, always “problematize(s) the nature and problem of experience,” recursively denaturalizing human nature, and returning it to capacities and the exploration of differentially constructed experiences (6). Mead’s project, as one that generates new capacities for questions, suggests a practice that could give new ways of analyzing and disrupting the prescriptive practices of the new psychology’s scientization of US adolescent development as natural, and instead, instantiate an ongoing study of its production. Such a possibility pre-emptively disrupts and offers an opportunity for a disruptive return that would counter the move to totalize US education under the unifying umbrella of rational “science.”

The Revolutionary Time of Study

The heuristic utility of isolation for experimental purposes poses specific problems—especially when experimental results become determined and procedures honed and repeatable; in such moments, isolation or segmentation can become naturalized, too, as given. This especially poses problems for the *political*

valences of science when applied to the study of human behavior and organization, as they were for Mead. The choice of isolated experimental system and the systemic explanation applied to it can come to stand in for or map over a field that extends beyond the experimental frame, presenting the impression that a single explanatory system can encompass not merely what it has rationalized (that which is inside the frame), but also the irrational beyond it. This in turn naturalizes divisions of the social or of life as given. The frame itself is *epistemological* and serves the purpose of making it possible to bring things into relation (to produce external relations) and produce causal explanations for such relations; although the frame has real effects, making the internal production of objects and relations possible, those effects extend beyond and traverse in unexpected ways what is totalized by the frame itself. The frame is not coextensive with the social field—the chaos—that provides its materiality.

This problem, however, is not solely an effect of a powerful science imposed hierarchically on differential bodies; it also becomes internal to *radical* activist responses—that is, to counter-sciences—that depend on an explanatory model developed through narratives of origin, systematicity, and imagined telos or determination implied by such an origin. The problem of counter-sciences reinscribing similar assumptions and divisions as dominant science is central to Combahee's critique, which they apply not only to dominant practices, but also to activist organization. Their development of an analysis of interlocking oppressions, intersectionality, helps them to depart from such an impasse by mapping a field *as it is*—experienced and known through its effects—rather than depending on a

singular origin that might provide a fully systemic explanation and enable the location of a singular point of attack.

Strategies of radical organizing, whether Marxist, feminist, or anti-racist, that depended on analysis of a single root cause were an impediment to the actualization of a collective minor empiricism that could intervene against the erasure of the politics of disinterested science as Combahee seems to understand it. Radical political ideologies, specifically as they have been constructed around taxonomies of social life, or what we might understand as singular identities—classes, sexes, or races—often operated to factionalize resistance to power in ways that were both more and less beneficial to those affected by it. In Combahee's moment, the most vocal and activist proponents of these political ideologies often depended on narratives of singular origins of oppression—be they capitalism, patriarchy, or racism—in order to offer a systematic or total *explanation* for existing features of oppression. Although such analytics were compelling for their explanatory power, they often had the result of separating or reducing both the specificity and commonality of interests of oppressed groups from one another, and, perhaps more importantly in the case of Combahee, strict adherence to these ideologies did not merely divide groups from one another, but also factionalized the individual experience of group members who operated at the interstices of these identities.

As I described earlier (and in great detail in chapter one), the arbitrary isolation of an experimental system and experimental object is one productive way

in which laboratory experimental science proceeds.³² The translation of this practice to analyses of *social* systems, especially as they emerged in social science theories, is in part an effect of what Porter has described as the mobilization of natural and physical science practices and epistemologies within the social sciences. He argues that what Auguste Comte, father of positivism, had earlier called the moral sciences—and which we today call the social sciences—benefited in terms of authority from the supposed unification of science by a shared “method.” As they were increasingly professionalized throughout the twentieth century, the social sciences—including psychology, sociology, and criminology—became increasingly technical, quantitative, and for those reasons, seemingly objective, built on empirical observation and its quantitative extrapolations. Interestingly, even as ideology critique was committed to understanding the *politics* of social systems, it emerged and operated within, across, and in conversation with the social sciences—and one need only think here of the idea of Marxist science—in ways that presupposed both the value of objectivity and also the systematicity, causality, and rationality of the social world. In order to describe oppression, then, ideology critique, whether feminist or Marxist or anti-racist, often operated by isolating a given causal structure—for example, patriarchy—and identifying it as a singular locus of oppression.

³² See: Hans-Jörg Rheinberger, *The History of Epistemic Things*. Although such isolation need-not be a limit or political problem for experimental science—and, in fact, it is often of great utility—it has implications when such isolation is understood as given rather than heuristic.

Tied to singular identities and competing explanatory narratives, it becomes difficult for, say, the black nationalist movement to find ties to the feminist movement, even as the members of Combahee identify with and are oppressed by the forces that concern both movements. We might extrapolate from Combahee's statement a concern with both the forms of biologism that produce and enforce race and sex, but—insofar as those categories come to constitute social structures—also recognition that they must operate from the material grounds that such categorization has wrought, *regardless* of the origins. What would it mean not to return to and demolish a singular origin of oppression—whether that be patriarchy, racial commodification, or Enlightenment scientism—but instead to produce a revolutionary practice that could describe and identify the multiple, seemingly competing, and often contradictory instantiations of oppressive forces in their own moment, operating from the grounds of the now in order to produce, engage, and actualize the interrelations among concerns that science, social science, and political ideology grounded in those practices imagined as separate? Rather than rejecting the “knowledge” created by these practices on their own disciplinary grounds, how might one question the very value of knowledge grounded in given ontologies and produce an alternative. . . in the case of Combahee, an alternative grounded in the value of “belief” and the productive capacities of empirical thought?

In response to the problems of organization based on singular identity categories, the members of Combahee chose not to assert “‘correct’ political goals” that might lead to committing “reactionary and destructive acts” in order to achieve

them. Instead, they chose to defer any externalizing moralism, and focus on the revolutionary-becoming of their own collective. They state:

As feminists we don not want to mess over other people in the name of politics. We believe in collective process and non-hierarchical distribution of power within our own group and in our vision of a revolutionary society. We are committed to a continual examination of our politics as they develop through criticism and self-criticism as an essential aspect of our practice. [. . . We] are ready for the lifetime of work and struggle before us. (13-14)

Although they express a willingness to struggle along with other self-organized groups engaged in political action, they suggest that any group whose members organize around shared oppression should have the right to determine the constitutive features and desired responses to that oppression. Accordingly, they do not see it as their task to “educate” those who are not involved in their collective. They state, for example, “Eliminating racism in the white women’s movement is by definition work for white women to do” (13). Study, internal accountability, and projects focused on eliminating their own oppression—“as opposed to working to end somebody else’s oppression” or presuming to know, understand, and critically determine the specific features of someone else’s oppression—is for Combahee “embodied in the concept of identity politics” (4-5). Their political practice is grounded first and foremost in their analysis—of their own relationship to the multiple forms of identity they choose and which are imposed on them—through study, a collective study that allows them to emerge in both their writing and speech as a *we*.

In order to understand the value of an autonomously produced and personally-grounded science, rather than one that seeks its force through

“education” and epistemological unification, it is helpful to pay some attention to Combahee’s description of their self-formation. In the penultimate section of the Statement, entitled “Problems in Organizing Black Feminism,” the Collective outlines a series of internal debates over what form their revolutionary practice should take. At first, the group deferred making a decision about a specific shared political practice, and “individuals continued their involvement” in political projects external to the Collective—including Lesbian politics, sterilization abuse and abortion rights work, and support activity for ongoing political trials—while they assessed what they had and what they might want to offer as a group (10-11). Over several years time, the group shifted, becoming increasingly interested in class analysis and simultaneously struggling over internal differences with regards to sexuality and class. Finally, in 1976, they write, “Those of us who were still meeting had determined the need to do political work and to move beyond consciousness-raising and serving exclusively as an emotional support group. [. . .] We decided at that time [. . .] *to become a study group*” (12, emphasis mine).

The establishment of a collective organized around study—around the value of being a student rather than an expert—is not only a break from leftists groups whose goals were to eliminate the false consciousness of others through education in proper ideology (most notably, those that aligned themselves with scientific Marxism), but also a break from the value systems that organize time in ways that valorize the events of life as a means to an ending, to the production of history and knowledge. Moreso, it also refuses the education provided by a dominant and scientized educational system as the means to knowledge about the world and their

position in it. While they recognize that the systematic denial of black youths' access to education has important economic repercussions—repercussions that were clearly related to the rapidly expanding prison system—they do not seem to advocate for the particular value of institutionalized education beyond its role as a means to economic-qua-political control. In turning to study over and against institutionalized education, the group contributes to a broader critique of the US educational system proffered by thinkers affiliated with other aspects of the black liberation moment. The critique they join in producing can be found both in the longer history of reformers like WEB Du Bois, Ida B. Wells, and Mary Church Terrell, but also in thinkers of their own moment, such as Angela Davis and George Jackson.

In the 1970s, Davis was an ardent critic of the absence of blacks in school curriculum, and her article, “Reflections on the Black Woman’s Role in the Community of Slaves,” was written to refute the racial science outcomes of the Moynihan report and its cultural repercussion. Her work was integral to the writing of Combahee’s *Statement*.³³ Jackson, a Black Panther and radical philosopher of the prison, located the specific problems of the US educational system both in its refusal to take black people as the agents and subjects of history and in its advocacy of “science” as the best means to knowledge about the world.³⁴ Rather than seeing

³³ Davis’s article, “Reflections on the Black Woman’s Role in the Community of Slaves,” *The Massachusetts Review* 13:1/2 (1972): 81-100, is cited in the framing paragraphs of the *Statement* section entitled “The Genesis of Contemporary Black Feminism.”

³⁴ The idea of “science” as a singular field unified by “the scientific method” has little to no salience with regards to the actual practice of science. It is for this reason that I put the terms in quotation marks above. A further explanation of the ways in which

these two problems as disconnected, Jackson evinced a belief that the former was enabled by the latter's claim to disinterestedness, which papered over science's deeply interested political effects. While Jackson did not abandon the potentials of science, he did claim that the first step in a revolutionary practice would be "to extinguish forever the light of a perverted science" that grounds American "ideals, moralities, and institutions" (Jackson 100).

But simply because Comabhee joined in making a critique of education and institutionalized practices that reverberated from social science does not mean they abandoned the power of a counter-social science. Instead, they mobilized science in its multiple forms as a series of tactics within a mutating field that was being produced anew by them through their empirical science. Just as an intersectional approach to identity politics required strategic relays between identification and disidentification with fixed aspects of identity, Combahee's—and, more generally, Black feminism's—engagement with and revision of scientific and social scientific practices required both the strategic deployment of technoscientific and scientifico-juridical conceits as they had emerged and gained power in the twentieth century, but also, simultaneous refusals of many of the underlying assumptions about and conceptions of life that structured and gave such conceptions their power, thus breaking with dogmatic or unified approach to activism. On the one hand, the members of Combahee were embedded in systems that enforced differential access to care, and so they therefore needed to identify with and support, for example,

science came to be understood in popular perception as a field unified by a single method will follow in the next section of the paper.

social scientific practices of assessing and improving women's health (Beverly Smith, one member of the Collective, was the first to teach a woman's health class at UMass Boston), and also strategically support practices such as scientific jury selection which was, in the case of Inez Garcia, being mobilized for liberatory purposes. But on the other hand, the group's efforts also required the production of critical alternatives to the pervasive and historically oppressive practices of science and social science that informed—in fact, had almost *become*—legal procedures and cultural consciousness. Combahee's Statement does both at once in the formal construction of its Statement.

The organization of their statement almost mirrors social scientific publications. Just as most social science publications consist of sections detailing 1. Introduction, 2. Literature Review, 3. Method, 4. Results, and 5. Discussion, the Collective's Statement was similarly organized. It is also divided into five sections that offer similarly organized information that include an introduction, history, orienting beliefs, discussion of problems, and future plans. This formal decision was perhaps influenced by members Beverly and Barbara Smith's academic experience. But, importantly, the social science form of the statement is cut by the political manifesto form, transforming the seeming after-the-fact reportage—as Latour and Woolgar describe science writing's self-presentation—into an affirmation of immanent constitution in the practice of writing. Such a reconfiguration of science reporting, then, offers a conception of scientific practice that can recognize the ontological cuttings of "science" as epistemological and technological processes inseparable from the personal and political—and the personal *as* political—because

scientific practices and their epistemological determinations always emerge in, are informed by, and help to shape social organization. Combahee's formal invention ultimately operates to refuse a unified and disinterested conception of science and articulate a set of scientific practices more useful to their social situation. Indeed, they make writing itself a part of the experiment, by situating the production of the Statement in its own writing as part of a present continually unfolding in relation to a past not yet completed and future that is not so much yet-to-come as it is always becoming. The very production of such an alternative, critical form of knowledge production—as an enacted practice—then, could be said to not only offer but also *constitute* the alternative. The *practice* of analysis, in the case of Combahee, that emerges from their *belief* in their worth and their investment in *duration*—rather than incremental and progressive time—as revolutionary time constitutes the formation of what philosopher Gilles Deleuze calls a “minor people, eternally minor, taken up in a becoming-revolutionary.”

Study, which aspires to the perpetuation of the duration of that study as opposed to its end in expertise or mastery, appears in Comabahee's statement as a way of reconceiving of their own practice that revalues temporal “progress,” and allows the statement to operate much like the anti-bildungsroman of McCullers or the anti-sentimental novel of Mead. In particular, Combahee emphasize that this study is grounded in their own experience, which sets them apart from the general conditions of scientificity but links them to this minor tradition of empiricism. In their statement, Combahee conceives of a study of experience that is not readily given to information, taxonomy, or incrementalization, providing an alternative to

data-based knowledge used to proscribe and prescribe behavior. They outline a practice that operates in the continuous production of description and analysis, which does not come from an anonymous, disinterested “outside,” but by contrast emerges from their own experience, from the feltness of affective and sensorial perception not consonant with the dominant terms of experience nor readily given to codified knowledge. This constantly self-generating and adapting analytic enables the production of practices and procedures that can make new structures for enacting knowledge because it emerges as the capacity of experience to engender relations and associations for producing epistemological structures that, despite not being “given,” still exhibit real force. In doing so, they produce a practice that we might call an empiricism from below, a minor empiricism, that extracts empirical questions from the grips of a progressive positivism and offers a return to the radical questioning of the value of values, of the role of experience in experimentation, and of the structuring procedures of knowledge and of thought itself.

To understand the possibilities the Comabahee produces and their specific responses to a longer history of scientific conscription and intervention, it is helpful to read their statement’s formal effects as a work of literary invention or what philosopher Gilles Deleuze calls an act of “fabulation.” Claiming it as literary production can help us to understand both the insistent duration of Comabahee’s work and the real implications of McCullers’s fiction. I want to suggest that describing the statement in terms of fabulation offers a useful way for understanding the *experimental* possibilities of *experience* as a forceful challenge to

the value of positivist empiricist knowledge-production as well as the particular scientific interventions Combahee's collective (and) statement make(s). This intervention, although epistemologically disruptive is, like McCullers and Mead, not paradigm shifting—which is to say, it is not mobilized in the furthering of dominant science. It is, rather, part of an ongoing, repeated, and necessary challenge posed to dominant knowledge-power formations. The relationship between the possibilities of a radical strand of empiricism and the value of the minor—especially in terms of political possibility of minor literature—are suggested by Deleuze, both in his affirmation of literature as a “clinical” (creative, reparative) practice producing a “minor people” and his affirmation of empiricism as capable of producing “belief in the world *as it is*” as a central force for changing the values that will enable new political arrangements. This brings empiricism and fabulation, science and literature, into a positive political relation.

Combahee's Statement, then, becomes a performative site, an enactment of the production of not merely empirical subjectivity, but of collective subjectivity. In the Statement, the Collective imagines a non-teleological relationship to revolutionary time, which is both actualized in the duration of immediate and tasks and also endures as an ongoing, never-ending revolutionary practice; the Statement then appears as a “monument” to a future constantly and already in production. The Statement endures as art in the way suggested by Deleuze and Guattari when they write that art as “monument does not commemorate or celebrate something that happened but confides to the ear of the future the persistent sensations that embody the event: the constantly renewed suffering of men and women, their

recreated protestations, their constantly resumed struggle” (Deleuze and Guattari, *Philosophy* 176).

Decidedly, the *event* of ongoing struggle is the ongoing occasion for Comabehee’s production. They suggest that their position at “the bottom” of the social hierarchy disenables access to the procedures of civic reform—procedures that would require them to accept a progress narrative of modernity and therefore “fight the world” (12). For them, “fighting the world” is undesirable, and they see the suggestion that they are relegated to do so as “pessimistic.” More hopefully, and more importantly, they claim that the same position enables the thought of an alternative not limited to reform. Being on the bottom allows them “to make a clear leap into revolutionary action.” But revolutionary action here indicates not *a* revolution to be won; they see their “revolutionary task” as engaging in a “lifetime of work.” Revolution is a lifetime practice that includes not only their own lifetimes, but also the “*countless*” (both innumerable and uncountable) “generations” of women that preceded—and presumably will follow—from them (14). Rather than fighting the world, they join with a counter-tradition that names another, otherwise invisible, way of seeing the material of this world *as it is*. By creating and joining this history as an insistent, disruptive force, they give an alternative to the epistemological structurings of juridico-scientific civic life.

Recently, in “‘We’ in Redux: The Combahee River Collective’s *Black Feminist Statement*,” Brian Norman productively reads Combahee’s Statement in the tradition of the manifesto as a performative, in the sense described by J.L. Austen and Judith Butler reading Austin. Norman suggests that the statement enables the

ongoing production of a collective “we,” a people, through its generative and continued enunciation. Norman’s reading helps to articulate the continued material and conceptual capacity of the Statement to affect and effect the groups who read, re-read, print, and publish it. However, Norman imagines the Statement as “utopian” in the sense that develops an impulse aimed at the future, which engenders ongoing revolution but is not itself fully successful as revolutionary. But, in the terms of the groups own sense of revolutionary time, in which the revolution would be immanent to its own materiality, it could be said that their revolution both succeeds and, in the statement, makes what Deleuze and Guattari calls “art” as “monument.”

They write:

This is, precisely, the task of all art, [to] extract new harmonies, new plastic or melodic landscapes, and new rhythmic characters that raise them to the height of the earth’s song and the cry of humanity: that which constitutes tone, health, becoming, a visual and sonorous bloc. [Art as] monument does not commemorate or celebrate something that happened but confides to the ear of the future the persistent sensations that embody the event: the constantly renewed suffering of men and women, their recreated protestations, their constantly resumed struggle. Will all this be in vain because suffering is eternal and revolutions do not survive their victory? But the success of a revolution resides only in itself, precisely in the vibrations, clinches, and openings it gave to men at the moment of its making and that composes in itself a monument that is always in the process of becoming, like those tumuli to which each new traveler adds a stone. The victory of a revolution is immanent and consists in the new bonds it installs between people, even if these bonds last no longer than the revolution’s fused material and quickly give way to division and betrayal. (Deleuze and Guattari, *Philosophy* 177).

Reading for this version of Combahee, and affirming even more intensely, the claims made by Norman, which can be opened up by reading their capacity to bring together and bridge, through negotiations and relays, the seemingly unbridgeable

differences that divide social, scientific, and aesthetic concerns, and which can be iterated in time, helps to demonstrate the ways in which not only writing but also reading—especially collective reading—becomes an empirical practice that can produce a minor people. This reading would be the “intensive reading” I have spoken of in the previous chapter: reading that continually puts a book or writing in contact with the forms of life outside of it. Combahee’s “study,” and their intersectional analytic, operates in just such a way.

By taking “the personal is political” as the grounds of their study, Combahee helps to illuminate the personal and political aspects of “science” that served as the central component of pedagogy in US institutional education throughout the twentieth century. Without referring to a unified “science”—in fact, precisely by refusing to imagine it as a unified field—the intersectional analytic and political practice of the Combahee Collective makes a radical intervention against the power of a unified, positivist, and nominally “disinterested” conception of science and its authority in determining policies and institutional practices around raced, classed, and gendered bodies. It does so by returning to “empiricism” the radical force of *belief*—what Deleuze suggests must be “belief in this world *as it is*”—rather than “knowledge” (Deleuze, Cinema 170). The Combahee River Collective—as did McCullers before them—makes of *experience* an *experiment*, a *force to create new values*. Importantly, this means taking reading and collective study not merely as practices by which one comes to understand experience, but as themselves forms of experience.

“To Wide Ourselves Free”: Aesthetic Events and the World

The question of what it might mean to believe in the world *as it is* is a pressing one for understanding minor empiricism, just as it was in the previous chapter for understanding minor realisms. In fact, McCullers’s insistence that her writing should be understood as *realism* as opposed to Southern Gothic speaks to her conviction that her strange worlds are *this world* as it is.³⁵ I take the importance of “belief in *this world as it is*” from Deleuze, who, in *Cinema 2* writes:

The modern fact is that we no longer believe in the world. We do not even believe in the events which happen to us, love, death, as if they only half concerned us. [...] The link between man and the world is broken. Henceforth, this link must become an object of belief: it is the impossible which can only be restored within a faith. Whether we are Christians or atheists, in our universal schizophrenia, we need reasons to believe in this world. It was already a great turning point in philosophy [...]: to replace the model of knowledge with belief. But belief replaces knowledge only when it becomes belief in *this world as it is*. (Deleuze, *Cinema* 171-3, emphasis original)

Here, “as it is” does not imply total *knowledge* of the world. In fact, belief in the world as it is refuses any ontology that could be mapped by epistemology precisely because the ontological is never *fully* realized. Instead, belief in the world refers to not only the actualizations of the world that can be known—including those

³⁵ In an essay entitled “The Russian Realists and Southern Literature” (1941), McCullers rejects the label of “Southern Gothic” as it has been applied to both her and fellow Southerner William Faulkner. She writes, “In the South during the past fifteen years a genre of writing has come about that is sufficiently homogeneous to have led critics to label it ‘the Gothic School.’ This tag, however, is unfortunate. The effect of a Gothic tale may be similar to that of a Faulkner story in its evocation of horror, beauty, and emotional ambivalence—but this effect evolves from opposite sources; in the former the means used are romantic or supernatural, in the latter a peculiar and intense realism.” See: McCullers, “The Russian Realists and Southern Literature.”

actualized by science—but also the potentials and virtuals existing, becoming, and still to be made.³⁶ Belief in the world means having a desire for the materiality and generativity of the world that enables one to connect to it. Even the most damaged and damaging social arrangements of material and cultural life can still provide the grounds of and from which to make a world worth struggling for.

Belief in the world can best be understood as a sensorial disarrangement that also disorganizes the *known* world, making it possible to connect to it, rather than seeing it from the outside or from a standpoint sees a totality. Belief names a relationship to thought that is different than that of supposedly given knowledge; it offers the “identity of thought with choice as determination of the indeterminable” (Deleuze *Cinema 2* 178). Through belief, the world is disorganized, de-determined from the fully coded structures of knowledge that aspire to or construct it as a systemic totality. The matter and forces that comprise the world are made available for new forms of organization that can emerge from “the simple belief of the one who chooses to choose (and restores the world and life).” The desire for the world and the struggle to actualize a capacity to think and therefore produce an aesthetic vision of the world that could de-totalize it and make it available to empiricism and empiricist production is central to much of McCullers’s writing.

Clock without Hands, her final novel, and the one most concerned with science, offers a passage that highlights the distinction between a vision from the outside or above that might totalize the world, and one from which one might find

³⁶ In this sense, the ontology—to the degree that its chaotic form(ation)ing can be called ontology—that minor empiricism encounters is best described by the black radical/open onto-epistemologies I described in the previous chapter.

the compulsion to enter into it in its partiality, multiplicity, and excess. Near the end of the novel, Sherman, for whom Jester has felt an intense and confusing love, has been killed by a white supremacist group that bombs his house. Jester, an aspiring pilot, takes the man who committed the bombing up in his small plane and, out of anger and a sense of injustice, intends to shoot him. The narrative breaks, a white space between the otherwise continuous story, and a brief passage appears that could be the free indirect discourse of Jasper, although it almost appears as a thought from a dislocated narrator bleeding into the reader, author, and Jasper himself.

At length, the passage reads:

Looking downward from an altitude of two thousand feet, the earth assumes order. A town, even Milan, is symmetrical, exact as a small gray honeycomb, complete. The surrounding terrain seems designed by a law more just and mathematical than the laws of property and bigotry: a dark parallelogram of pine woods, square fields, rectangles of sward. On this cloudless day the sky on all sides and above the plane is a blind monotone of blue, impenetrable to the eye and the imagination. But down below the earth is round. The earth is finite. From this height you do not see man and the details of his humiliation. The earth from a great distance is perfect and whole.

But this is an order foreign to the heart, and to love the earth you must come closer. Gliding downward, low over the town and the countryside, the whole breaks up into a multiplicity of impressions. The town is much the same in all its seasons, but the land changes. In the early spring the fields here are like patches of worn gray corduroy, each one alike. Now you could begin to tell the crops apart: the gray green of cotton, the dense and spidery tobacco land, the burning green of corn. As you circle inward, the town itself becomes crazy and complex. You see the secret corners all the sad back yards. Gray fences, factories, the flat main street. From the air men are shrunken and they have an automatic look, like wound-up dolls. They seem to move mechanically among haphazard miseries. You do not see their eyes. And finally this is intolerable. The whole earth from a great distance means less than one long look into a pair of human eyes. Even the eyes of the enemy. (McCullers, *Clock* 233-4)

Here, the narrative takes on the quality of an omniscient and reflexive narrator only to reject a preference for omniscience or objectivity. Following this passage, Jasper drops the gun from the plane without shooting the man, and returns to the ground. The clarity with which retribution appeared to Jasper disappears into an affirmation of ongoing struggle when he meets the intolerable of disconnection.³⁷ The perfect whole of a world system seen from above makes it easy to disconnect, perhaps impossible to connect. Explanation, which could only emerge from a vision of totality, means nothing without an engagement with the ground itself, and with another living being. In this kind of intimate engagement, knowledge moves away from explanation and towards description and/as experience. The sensorium, perceiving from a distance, tends towards division, organization, order, and mastery; the sensorium immersed intensifies with new and unregulated capacities. This affirmation of the ground in proximity moves Jester not to take a life, but instead moves both him and the novel towards one possibility of minor literature: “shattering lived perceptions into a kind of cubism, [and] freeing life wherever it is imprisoned, or [...] tempting it into uncertain combat” (Deleuze and Guattari, *Philosophy* 171), making it possible to engage in struggle rather than control and decimation.

The disorganization of totality requires not merely a disorganization of space, but also of time. The stilling of flesh into bodies as well as the ordering of life

³⁷ See Chapter 1 for a longer discussion of the “intolerable,” which I defined as a situation in which material conditions and practices are no longer suitable for life. An encounter with the intolerable impels a response that will transform those conditions.

into progress are the means by which a spatial map can begin to produce and organize a totality. A concern with the ways in which time is organized in and organizes the world appears more clearly in McCullers's earlier novel, *The Member of the Wedding*. Frankie's long, strange summer and her sense of unbelonging, intensified by her desire to create a new and autonomous "we," is precipitated by a transformation in her experience of and descriptive approach to the world. That summer is the end of "the year when Frankie thought about the world" (23). She realizes that her experience of the world has long seemed out of joint with the facts she has been given about it: "You know," she says, "it is still hard for me to realize that the world turns around at the rate of about a thousand miles an hour, [...] and to understand why it is that when you jump up in the air you don't come down in Fairview or Selma or somewhere fifty miles away" (15). The world moves, and she cannot comprehend her seeming stasis in it. And for the first time, even the "facts" of her schoolbooks are out of time with the world-in-progress. Suddenly, Frankie "did not see [the world] as a round school globe, with the countries neat and different colored. She thought of the world as huge and cracked and loose and turning at a thousand miles an hour" (McCullers, *Member* 23). McCullers highlights the failures of static knowledge, especially that given through institutionalized education, to capture the ever-changing world: "The geography book at school was out of date; the countries of the world had changed." Faced with ongoing news of the battles of World War II, Frankie is overwhelmed by the enormity of the world and its changes, by the millions and millions of people whom she cannot conceptualize except as a rotating inner montage of soldiers of different nationalities in different places. In the

midst of a disarranged world, she feels afraid. But importantly, she is afraid not because she fears for her own safety, but “because in the war they [might not] include her, and because the world seemed somehow separate from herself” (24). Her fascination with the war, then, and its rearrangement of the world also elicits a compulsion to belong to the world, to be a member of it. Here, for Frankie the possibilities of and desire for a loose and cracked world—the desire to actualize the fulfillment of a “a strongly-felt need for some level of possibility that did not previously exist in her life” that would also bring Combahee together several decades later—operate through a disorganization and reconfiguration of physics, geography, and history.

In *The Heart Is a Lonely Hunter*, published only six years before *Member* and set on the dawn of war rather than in its midst, Mick—also an adolescent girl and something of an earlier iteration of Frankie—experiences a shift in both her perception of the world and its possibilities that is directly engendered by aesthetic experience. The effects of this experience evince an unexpected understanding of science as organized by aesthetics. Alone in the dark, having escaped from a birthday party that brought her another year closer to a majority she dreads, Mick is thrown into a violent and creative connection with the earth by a jolting encounter with art. A radio program plays through an open window, and she hears Beethoven for the first time. The music engenders a synaesthetic experience, “boiling” and “hot” inside her, appearing as a “silver tune” and a “black march,” disrupting not only her sensorial organization but also temporal progression: “The music did not take a long time or a short time. It did not have anything to do with time going by at all”

(McCullers *Heart* 100-101). It makes of time a duration that is not a passage but an intensification. And it elicits a series of questions that she barely even knows how to ask beyond undirected, non-sequitur inquiry—"Which?"—that at its most formed is an effort to remember "How did it come?" so that she can experience it again.

The beautiful violence of disruptive generativity finds expression in Mick's embodied response that brings her into proximity with the ground, becoming the world. Losing any sense of identity, she becomes the music: "This music was her—the real plain her" (100). But simultaneously, "The whole world was this music and she could not listen hard enough [...] there was not enough of her to listen" (100). She is broken open, disarranged by the experience: "Wonderful music like this," she thinks, "was the worst hurt there could be" (101). When the recording ends:

Suddenly Mick began hitting her thigh with her fists. She pounded the same muscle with all her strength until the tears came down her face. But she could not feel this hard enough. The rocks under the bush were sharp. She grabbed a handful of them and began scraping them up and down on the same spot until her hand was bloody. Then she fell back to the ground and lay looking up at the night.

Without passing through any articulated conscious thought, Mick tears herself open with the ground itself and finds herself in a new relationship to the world. Looking up at the sky she asks, "Why hadn't the explorers known by looking that the world was round?" From inside the world, what is (in lay-history) understood as a major scientific and geographic revolution—the discovery of the round, endlessly connected earth—becomes not a revolutionary discovery but instead a mark of the

disbelief, disconnection from the world that had preceded such a discovery.³⁸ For Mick, the conditions for belief have been actualized in her by a jolt, an encounter with the intolerable made available and countered through music and an aesthetic rearrangement that allows her to see and feel the world differently. It is for her both an event that produces belief and an occasion for inquiry about the more general production of beliefs as they provide the grounds for knowledge and practice that already carries with it the doubleness of minor empiricism as a description that simultaneously reflects on the very practice of the production of that description.

I already suggested in the opening pages of this chapter that one way *writing* might not only register but also effect such a change is through disruptions of generic conventions and rearrangements both of the values advocated by genres like the bildungsroman and of the assumptions about the workings of time and history that underpin such values. The strange, non-linguistic and not fully cognitivized form that sensorial rearrangement takes for Mick, a transition that appears as an experience she does not even fully know how to put into questions even as she is curious about it, is but one way of understanding such a change. While for Mick this disruption operates at the level of a single self and through an encounter with what is traditionally recognized as art or the aesthetic, McCullers's later novel, *Member*, turns to a practice of minor empiricism as a way of actualizing

³⁸ Although Thomas Kuhn, whose theory of paradigm shifts within science hinges on the notion of the "scientific revolution," would not consider this particular "discovery" a scientific revolution (largely because the myth that a belief in a flat earth pervaded the early modern period has long been dismissed), this passage highlights a concern within McCullers's writing with "revolutions" and their capacities for thought that both pervade and extend beyond science.

the disruptive possibilities of aesthetic rearrangement for a collective through a curious sensorial encounter with the world that can be both revealed through art, but also makes of world experience an aesthetic experience.

The passage from Singer's letter that appeared earlier in this chapter raises the question of isolation—a concern that also fueled Combehee's study and Mead's method—as a matter for inquiry. Singer's seeming assertions that the group he witnesses *is* together without knowing it begins to raise new possibilities for understanding McCullers's work beyond its dominant critical reception. The relatively brief period of critical response to McCullers's acclaimed novels brought with it repeated suggestions that her novels represented the isolation and loneliness inherent in the human condition.³⁹ As Oliver Evans wrote, it seems that each of McCullers's characters is in a "zone of loneliness," "serving a life sentence in solitary confinement" (Clark 126). Yet, if each character is in solitary confinement, I want to suggest that, as with George Jackson in my previous chapter, such solitary confinement becomes the condition of the intolerable that constructs life itself differently, not only enabling new concepts of community but also actualizing new ways to construct them.

Indeed, I find something deeply wrong with a totalizing reading of McCullers that would find her most enduring theme to be an affirmation of the isolation and loneliness inherent in the human conditions, when this is a writer who did, in *The*

³⁹ See for example: Louis D. Rubin, Jr., "Carson McCullers: The Aesthetics of Pain," and Oliver Evans, "The Case of Carson McCullers," in *Critical Essays on Carson McCullers*, Eds. Beverly Lyon Clark and Melvin J. Friedman (New York, NY: G.K. Hall, 1996).

Heart Is a Lonely Hunter, bring together through Singer that motley crew of a black Marxist doctor, a Jewish labor organizer, a capitalism-hating business owner, and a fourteen-year-old resisting the demands of coming-of-age through increasingly politicized encounters with music. This is a writer who also brought together a self-appointed “queer” community of a black female caretaker, a criminally prone white twelve-year-old girl, and a gender-bending six-year-old boy. These motley crews are, I would suggest, minor people in every sense: de facto groups brought together by circumstance whose minority spans race, class, gender, sexual orientation, disability, and age. They accumulate not around a single, shared identity, but negotiations of identity with irreducible forms of difference—irreducible differences that affirm minority as a site of struggle. Struggle, yes, includes senses of loneliness, isolation, and deprivation, but it also produces forms of life and otherwise invisible sociality.

McCullers, like Mead, but moreso like Combahee, faced the problem of being multiply pathologized. She was gender-queer as well as bisexual, and suffered from the fate of many women writers of being pathologized posthumously for her strange sociality: repeatedly diagnosed retrospectively with bipolar or borderline personality disorder (94). Both of her biographers describe her as either childlike or childish, behaving irrationally far beyond her ascent into age majority (91).⁴⁰ And beyond these psychological pathologizations, McCullers also suffered from a debilitating illness—now thought to have been a series of strokes—that left her bed-

⁴⁰ See: Savigneau, *Carson McCullers: A Life* and Virginia Spencer Carr, *The Lonely Hunter: A Biography of Carson McCullers* (Athens, GA: Univ. of Georgia Press, 2003).

ridden for most of her adult life. She was, no doubt, a “difficult” and “improper” personality, as Savigneau described her. And as such, she frequently became a social pariah. During her early adult life in Georgia, she was repeatedly criticized for her close friendships that crossed racial lines. And although she would live in New York’s bohemian communities and would associate with writers and performers of all stripes there, she was also disliked and cast-out as a particularly needy and strange personality (Savigneau 75). She wanted more than anything to be apart of a “we,” to be loved, and such a desire was often experienced as extremely needy. Indeed, her writing often reflected this sense of a huge, gaping desire for—love for—the world that threatened to swallow the world whole. As the writing François Sagan later wrote of her, McCullers’s illness is a mark of “someone who is too sensitive, who has seen too much and learned too much from what she has seen, and perhaps written too much about it, to be able to bear it or endure it any longer” (quoted in Savigneau 253). Strikingly, this phrase is quite close to one that Deleuze used around the same time to describe the strange health of the minor writer:

The writer would [not] necessarily be in good health [...] but he possesses an irresistible and delicate health that stems from what he has seen and heard of things too big for him, too strong for him, suffocating things whose passage exhausts him, while nonetheless giving him the becomings that a dominant and substantial health would render impossible... (Deleuze, “Literature” 229)

This understanding of the writer’s task is one that can help us to see how, far from trying to make the world belong to her, McCullers was in every way trying to belong to the world, the affects of which overcome her. In committing herself to the world,

she engendered a belief that could make it anew through a practice of writing, which also served for her as the production of a minor people.

Recently, Jennifer Murray has suggested that one way *The Heart Is a Lonely Hunter* produces such sociality in spite of its characters' failure to recognize their community is by creating a series of formal aesthetic associations for the reader that connect the characters even when they cannot see themselves that way. McCullers, she argues, collapses space and time, cutting from one character in one space to another in another, but connecting them through the landscape and milieu: shared sun shining into rooms separated in space and time, a sound carrying through from one scene to the next (Murray 108). Ultimately, Murray asserts—in language that very much mirrors Michelle Murphy's understanding of Combahee's refusal of a "authentically revolutionary subject position"—that the novel negotiates different life situations, and, like Mead's scientific practice, does so through a study of parataxis that refuses "transcendental values." Murray writes:

The undeniable strength of the novel is not, I believe, to be found in the lives of any of the characters in particular. There is no "key" perspective or philosophy to be discovered in any of their separate paths or choices. Rather, the novel's force is in the overall movement of empathy with suffering, hardship, and failure, but also with love, companionship, and desire that it provokes in the reader. McCullers's narrator offers no transcendental values against which to evaluate the characters, no judgment of their choices. We are given only the unapologetic exposure of their strengths and weaknesses and are thereby placed in a position of understanding towards them. (114)

As Murray describes it, the existence of the minor community is actualized in readerly experience through the provocation of association.

Here, I suggest that a trajectory that could make this associative practice *communal* is not only to be found in readerly experience, but can also be found in tracing a larger movement from these readerly associations described by Murray, to a collective practice of minor empiricism that is shared by multiple characters in *The Member of the Wedding*, the reader, and perhaps even McCullers herself. Tracing this passage, which connects writer to character to reader, collapsing the time and space that divide them, evinces the capacity of liminal experience or the exteriority of pathology to produce a transversal desire for and enactment of what Deleuze and Guattari call “becomings”—becomings that pass not only from person to person, but also merge with the landscape, the ground, and the world (Deleuze and Guattari *Philosophy* 169)—as a means of breaking out of the strictures of a moralizing science and history in order to make a minor people through minor empiricism.

In *The Member of the Wedding*, McCullers produces the act of questioning experience as itself a shared experience that passes among characters and readers. In this, reading becomes experimental and undetermined, an opportunity for the doubling of the empiricist practice operating within the pages of the novel. Indeed, empiricism, experience, and experiment are linked concepts. But here, the experiment would not be one that, in the terms of twentieth century positivism, would give way to knowledge, taxonomy, or transparent data; it would, instead, operate in the terms of Michel Foucault as an experience, “something you come out of changed” (Foucault, “Experience Book” 27). Thinking of the matter of literature as mattering, as producing a change in thought, and thought as constituting the actualization of matter, helps to link the work of McCullers to that of Mead, and

perhaps even moreso to the production of political collectives like Combahee. Here, McCullers's literature resists a function as escapist, individual fantasy or as mimesis, or as universalizing narrative. It is not a reproducer of ideological imperatives via the reguatlive function of fantasy dissemination. Instead, literature and its study appear as *techne*, giving us the aesthetic capacity to alter productive perception, thus enabling literature to act as a political, social, and epistemological force. Literature links up with the world in an "intensive reading" practice that Deleuze described as "reading with love," connecting a book to those flows of life outside and beyond it (rather than seeking inside it for signifiers) (Deleuze, *Negotiations* 8-9).

This linking of empiricism, experience, and experiment is at least one way of affirming the ontological dimension of literature as thought. Or, put another way, at least one thing literature does when understood via sensorial experience is to produce new questions and new ways of asking questions about a world, not in order to know it but to constitute it. But let me be clear, because I am perhaps saying something a little different than it sounds like I am. I am not suggesting that asking new questions gives new answers around which to necessarily construct the world. Doing so would be to reduce literature to a positivist empiricism; or, conversely, to make it merely fantasy or bad utopian literature, deferring a future forever to an impossible no/good place. Instead, I am suggesting that the very practice of asking questions, of being curious, is already to be social, with people and with the world. It is not the answers that constitute the community, but the asking of questions, the sharing of inquiry.

Recently, several scholars in queer and disability studies have sought to recuperate McCullers's work from its earlier readings, and have done so largely under the aegis of queer utopia, imaged but deferred.⁴¹ However, I want to suggest that neither an insistence on the universality of isolation nor the production of deferred utopia are the political limits of McCullers's literary imagination. Instead, her use of empiricism as a mode of inquiry production has deeply political consequences, consequences that reconfigure that very site of the political in the immanent production of a community that questions, imagines, and believes.

As I suggested in the opening to this chapter, the dual ending of *Member* already disrupts a reading practice that would use the ending of a novel to totalize it or claim for it a didactic function. In this way, the novel refuses teleology and demands a reading practice that does not depend on endings. This kind of reading highlights the capacities of the nonteleological, the impermanent, and the immanent matter of reading itself. Reading *Member* in this way, I focus not on the novel in its entirety, but on the second section of the novel, which is comprised of the experience of a single day, made into the infinite duration of quotidian life, its potential for spectacular imagining, and its affirmation of experience as productive of the struggle to ask questions—collectively—in the not-yet of answers, in the face of no guarantees.

Several commentators have noted that central to this scene is a moment in which Frankie, her black caretaker Berenice, and her six year old cousin John Henry “play god,” and imagine utopian versions of the world as it could be. For John Henry,

⁴¹ See Rachel Adams, “A Mixture of Freak and Delicious.”

this means a world where everyone can change their sex, from male to female, at will (McCullers, *Member* 96-98). For Berenice, it means a world without race, where both black and white are gone, and no one lacks for material needs. Frankie's world includes aspects of both John Henry's and Berenice's, but it also includes an island where people can go to war if they want to (97). For Frankie, not just struggle, *but a desire to struggle, and shared struggle as the site of meaningfulness* cannot be erased, cannot be subsumed by utopian imagining. Yet, one might say, that in understanding their utopian imaginings as "playing God," and remaking the world wholesale, the utopian impulse that binds them together is also a fantasy of world mastery that produces the world from an external standpoint (96). This is not to say that the utopian impulse doesn't bind them together—it does. It is in fact, something they do often, something that marks them as a community that imagines, an imagining community. In fact, what no commenter on the novel has noticed is that this is a scene that does not take place within the time-space of the novel, but is an amalgamation of what they *usually* do. This collapse of time makes this amalgamation appear as though it is almost part of the same day as the rest of the scene, but it is not. But, the actual occurrences of the day are also, centrally, a different kind of imagining.

On this day they do something different. Something that changes them in the way that contrasts their experience of utopian imagining, which has frequently appeared as mere fantasy, reaffirming their incapacity to change the world. And this something is something they can't understand in linguistic or cognizable terms, yet it binds them nonetheless. Frankie tries to put into words, words that don't even

appear in the novel itself, her experience of The Event. The event that carries great weight, though she can't understand it, and which means nothing, yet matters to her greatly. Despite a series of adventures (including being asked on a date by a full-grown soldier and an encounter with a man and his escaped monkey), the event is so seemingly inconsequential as almost not to appear at all:

It was a mysterious trick of sight and the imagination. She was walking home when all at once there was a shock in her as though a thrown knife stuck and shivered in her chest. F. Jasmine stopped dead in her tracks, one foot still raised, and at first she could not take in just what had happened. There was something sideways and behind her that had flashed across the very corner edge of her left eye; she had half-seen something, a dark double shape in the alley she had just that moment passed. And because of this half-seen object, the quick flash in the corner of her eye, there sprung up in her the sudden picture of her brother and the bridge. Ragged and bright as lightening she saw the two of them.... (74-5)

Here, Frankie does not exactly perceive as “pass[...] into the landscape and [is herself] part of the compound of sensations” which Deleuze and Guattari describe as “becoming imperceptible” (Deleuze and Guattari, *Philosophy* 169). It enables her to pass “into the town like ‘a knife through everything,’” putting her inside the processes of perception rather than perceiving. Becoming imperceptible is not the same thing as becoming unseen; instead it is a becoming disorganized so as not be to be perceived or perceive what is as part of a given and recognizable order of the organization of the senses, sensible, and sensation. Out of the corner of her eye, a half-seen object in the alley, brings to her mind the sensation of belonging she felt when she saw her brother and his bride-to-be together and felt that she would be a

member of their wedding. She experiences memory as feeling, not image, it is a repetition and a reexperiencing of experience in a uncanny, queer way.

The relationship to meaning is here unclear, but clearly significant. Given the power and strangeness of feeling, she turns to see what it is that has evoked this queer and powerful sense of belonging. “And what was there? F. Jasmine was stunned. There in the alley were only two colored boys, one taller than the other and with his arm resting on the shorter boy’s shoulder. That was all” (75). F. Jasmine’s aesthetic disorganization has produced something that is “not resemblance, although there is resemblance. But it only produced resemblance” (Deleuze and Guattari, *Philosophy* (173). Instead it is a “becoming,” which “is a zone of indetermination, of indiscernibility, as if things, beasts, and persons [...] endlessly reach[ing] the point that immediately precedes their natural differentiation.” The disorganization of perception returns to her a capacity for new and undetermined organization.

What F. Jasmine struggles for, what she desires when she shares this with Berenice and John Henry, is a way not so much to articulate the uncanny experience but to ask about it. What? How? “Which?”—this sharp yet amorphous, “plain and exact” feeling of belonging to and with that which is only half-perceived and has a reality that both is and in excess of what she sees (McCullers, *Member* 75). She struggles to produce a question not about what it means or what it was, but a question nonetheless: a question she can neither formulate nor understand. But even in her fumbings to Berenice and John Henry, something comes across: transference, connection.

“Listen to me!” Berenice says, “Can you see through them bones in my forehead? Have you, Frankie Addams, been reading my mind? This is one of the queerest things I’ve ever heard of. I cannot get over it.”

“What I mean—” Frankie started again.

“I know what you mean,” said Berenice. “Right here in this very corner of the eye.” (99)

Berenice’s sharing of Frankie’s experience is as embodied as Frankie’s own, both of them have a sense of thought that is experience in the corner of their eyes (in the corner of her eye). Here, Frankie’s reconfiguration of the sensible is passed through the sharing of sensation enabled by a fumbling descriptive practice that doubles the experience, passing it as something other than itself that is also itself repeated, to Berenice.

This leads them to talk about love—“a thing known but not spoken”—for the first time; and F. Jasmine experiences herself as the strange self-proclaimed adult she has produced herself to be, “a person who understood and had worthwhile opinions” (100). And as they continue to talk, to all three erupt into tears together, and then to sit together, melting into one another. . . until dinner is over. They produce a monument to sensation through “*deframing*[,] following lines of flight that past through the territory only in order to open it onto the universe, that go from house-territory to town-cosmos,” cutting through experience *like a knife* making them *indiscernible* (Deleuze and Guattari, *Philosophy* 187). The moment ends, but it is both absolutely temporary—in the novel’s last section, Berenice quits her job and John Henry dies—and yet it is deeply consequential in ways that have nothing to do with the permanent production of identity or Frankie’s coming of age; it “does not

commemorate or celebrate something that happened but confides to the ear of the future the persistent sensations that embody the event" (177).

The conversation following Frankie's half-formed question-revelation about the event enables Berenice to affirm the seriousness and autonomous potential of being minor—both in Frankie's sense of being a young girl and in her own of being a black woman. She affirms that she herself chose to get married at thirteen, and she did it because she wanted to: she has as much right to happiness as anyone. This recognition/production of shared minority allows them to share their feeling of caughtness:

"I think I have a vague idea what you were driving at," [Berenice] said. "We all of us somehow caught. We born this way or that way and we don't know why. But we caught anyhow. I born Berenice. You born Frankie. John Henry born John Henry. And maybe we wants to widen and bust free. But no matter what we do we still caught. [...] We each of us somehow caught all by ourself. Is that what you was trying to say?"

"I don't know," says Frankie, "but I don't want to be caught."

"Me neither," said Berenice, "don't none of us want to be caught. I'm caught worse than you is."

Frankie understood what she meant, but it was John Henry who asked in his child's voice, "Why?"

"Because I'm black," she said. "Because I'm colored. Everybody is caught in one way or another. But they done drawn completely extra bounds around all colored people. So we caught that first way I'm telling you about, as all human beings is caught. And we caught as colored people, too. Sometimes a boy like Honey feel like he can't breathe no more. He feel like he got to break something or break himself. Sometimes it just about more than we can stand."

"Yes," Frankie said. "Sometimes I feel like I want to break something too. I feel like I wish I could tear down the whole town."

“So I’ve heard you mention,” Said Berenice. “But that won’t help none. The point is we all caught. And we try in one way or another to wide ourself free.”

In the recognition of difference that both understands the doubling of strictures placed on Berenice without erasing the reality of Frankie’s own strictures, they produce the relationality that they call caughtness, and their experience takes on a decidedly political valence: a desire to tear down the town and struggle into freedom. The desire for freedom, the affirmation of struggle in its irreducible difference, and the shared questioning of experience politicize the intimate space of imaginative empiricism: experience as collective experiment that produces an imagining community, a motley crew. It is the affirmation of the immanent production of a people, “even if these bonds last no longer than the revolution’s fused material” that makes possible an understanding of seemingly failed (which is to say, impermanent) social production as immanently successful in its experimental production (Deleuze and Guattari, *Philosophy* 177) In this way, it also affirms the need to continue experience and questions without even the imagined guarantees of knowledge.

Understanding minor empiricism as a practice that emerges in the face of no guarantees to produce belief as a way of connecting up with the world brings us back to the unfinished music that marks the time of Frankie’s summer. It raises the possibility of understanding this unfinished music, begun, partially constructed, it’s rules and possibilities apparent but not fully fated, makes the summer and the experience of empiricism appear as a way of extending time to latch on to the music itself. It becomes the opportunity to play on, from and with, the still-hanging music,

connect up to it, extend it. This suggests a way of overcoming and participating in an identity politics of partiality through minor empiricism, one that affirms the partial observer as an aesthetic gift that is not only the friend to science, but also of politics. The partial and reflexive observer becomes a privileged position for interacting with and contributing to other forms of struggle against power by oscillating, tactically, on the ground to encounter specific and given conditions as they come. Music as material, example, and metaphor extends the understanding I offered earlier, by way of Deleuze, of science as a composition on a plane of reference. Although a dominant science continually papers over the plane of reference produced by these disruptive, minoritarian empiricisms, they, by contrast, continue to link up to each other anew, without necessarily even being aware of the community they are making. McCullers, Mead, and Combahee produce an irruptive and renewable plane of reference on which to make of science a composition that affirms the organizational power of the aesthetic and the inherent politics of knowledge production.

5. Works Cited

- Adams, Rachel. "'A Mixture of Freak and Delicious': The Queer Fiction of Carson McCullers," *American Literature* 71:3 (1999): 551-583.
- Ahmed, Sara. "Feminist Futures" in *A Concise Companion to Feminist Theory*, ed. Mary Eagleton (Oxford, UK: Blackwell Publishing, 2003).
- Althusser, Louis. "Ideology and Ideological State Apparatuses: Notes Towards an Investigation," in *Lenin and Philosophy and Other Essays* (Monthly Review Press, 1971).
- Baker, Houston A. Jr. "The Point of Entanglement: Modernism, Diaspora, and Toni Morrison's *Love*," *African and Black Diaspora: An International Journal* 4:1 (2011): 1-18.
- Berlant, Lauren. *The Female Complaint: The Unfinished Business of Sentimentality in American Culture* (Durham, NC: Duke Univ. Press, 2008).
- Blair, Sara. *Harlem Crossroads: Black Writers and the Photograph in the Twentieth Century* (Princeton, NJ: Princeton Univ. Press, 2007).
- Bradley, Adam. *Ralph Ellison in Progress: From Invisible Man to Three Days Before the Shooting. . .* (New Haven, CT: Yale Univ. Press, 2010).
- Braudy, Leo. "The Form of the Sentimental Novel," *Novel: A Forum on Fiction* 7:1 (August 1973): 5-13.
- Burroughs, William S. *Junky: The Definitive Text of "Junk."* Ed. Oliver Harris. (New York, NY: Penguin Books, 2003).
- Burroughs, William S. *Naked Lunch: The Restored Text.* Eds. James Grauerholz and Barry Miller (New York, NY: Grove Press, 2001).
- Burroughs, William S. *Queer.* Ed. Oliver Harris (New York: Penguin Books, 2010).
- Campbell, J. Bradford. "The Schizophrenic Solution: Dialectics of Neurosis and Anti-Psychiatric Animus in Ralph Ellison's *Invisible Man*," *Novel* 43:3 (2010).
- Campbell, Nancy D., Olsen, J.P., and Walden, Luke. *The Narcotic Farm: The Rise and Fall of America's First Prison for Drug Addicts* (New York, NY: Abrams, 2008).

- Combahee River Collective, The. "A Black Feminist Statement," in *All the Women Are White, All the Blacks Are Men, But Some of Us Are Brave: Black Women's Studies*, Eds. Gloria T. Hull, Patricia Bell Scott, and Barbara Smith (New York, NY: The Feminist Press at CUNY, 1993).
- Deleuze, Gilles. *Cinema 2: The Time-Image* (Minneapolis, MN: Univ. of Minnesota Press, 1989).
- Deleuze, Gilles. *Empiricism and Subjectivity* (New York, NY: Columbia Univ. Press, 1991).
- Deleuze, Gilles. "The Intellectual and Politics: Foucault and the Prison," *History of the Present 2* (Spring 1986).
- Deleuze, Gilles. "Literature and Life," *Essays Critical and Clinical*. Trans. Daniel W. Smith and Michael A. Greco. (Minneapolis, MN: Univ. of Minnesota Press, 1997): 1-6.
- Deleuze, Gilles. *The Logic of Sense* (New York: Columbia Univ. Press, 1990).
- Deleuze, Gilles. "Nietzsche aujourd'hui," in *Intensities 1* (Paris: Union Generale d'Editions, 1973): 86-7.
- Deleuze, Gilles and Guattari, Felix. *What is Philosophy* (New York, NY: Columbia Univ. Press, 1994).
- Deleuze, Gilles and Guattari, Felix. *A Thousand Plateaus: Capitalism and Schizophrenia* (Minneapolis, MN: Univ. of Minnesota Press, 1987).
- Deleuze, Gilles and Parnet, Claire. "A Portrait of Foucault," *Negotiations*. Trans. Martin Joughin. (New York, NY: Columbia Univ. Press, 1997).
- Doyle, Richard. "LSDNA: Consciousness Expansion and the Emergence of Biotechnology," in *Data Made Flesh: Embodying Information*, ed. Robert Mitchell and Phillip Thurtle (New York, NY: Routledge, 2003).
- Dukas, Helen and Hoffman, Banesh. *Albert Einstein, the Human Side: New Glimpses from His Archives* (Princeton, NJ: Princeton Univ. Press, 1981).
- Einstein, Albert; Podolsky, Boris; and Rosen, Nathan. "Can Quantum-Mechanical Description of Reality Be Considered Complete," *Physical Review* 47 (1935): 777-780.
- Ellison, Ralph. *Invisible Man* (New York, NY: Vintage International, 1995).

- Ellison, Ralph. "Richard Wright's Blues," *Shadow and Act* (New York, NY: Signet, 1966).
- Eversley, Shelley. "The Lunatic's Fancy and the Work of Art," *American Literary History*, 13:3 (Autumn 2001): 445-468.
- Fleck, Ludwik. *Genesis and Development of a Scientific Fact*. Eds. Thaddeus J. Trenn and Robert K. Merton. Trans. Frederick Bradley. (Chicago, IL: Univ. of Chicago Press, 1981).
- Foley, Barbara. "The Rhetoric of Anti-Communism in Invisible Man," *College English* 59:5 (1997): 530-547.
- Foucault, Michel. "How an Experience Book is Born," *Remarks on Marx: Conversations with Duccio Trombadori* (Semiotext(e), 1991).
- Foucault, Michel. "The Masked Philosopher," *Ethics, Subjectivity and Truth: The Essential Works of Michel Foucault* (Harmondsworth: Penguin and Allen Lane, 1997).
- Foucault, Michel. "Maurice Blanchot: The Thought from Outside," in *Foucault/Blanchot* (Cambridge, MA: Zone Books, 1987).
- Galenson, David. "A Portrait of the Artist as a Young or Old Innovator: Measuring the Careers of Modern Novelists," *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 39:2 (Spring 2006): 51-72.
- Glissant, Édouard. "Reversion and Diversion," *Caribbean Discourse: Selected Essays* (Charlottesville, VA: Univ. of Virginia Press, 1999).
- Harcourt, Bernard E. "From the Asylum to the Prison: Rethinking the Incarceration Revolution," *Texas Law Review* 84 (2006): 1751-1786.
- Harding, Sandra. *The Science Question in Feminism* (Ithaca, NY: Cornell Univ. Press, 1986).
- Harris, Oliver. "Can You See a Virus? The Queer Cold War of William Burroughs," *Journal of American Studies* 33:2 (1999): 243-66.
- Heisenberg, Werner. *Encounters with Einstein* (Princeton, NJ: Princeton Univ. Press, 1983).
- Heisenberg, Werner. *Physics and Beyond: Encounters and Conversations* (New York, NY: Harper Collins, 1971).

- Heisenberg, Werner. *Physics and Philosophy: The Revolution in Modern Science* (New York, NY: Prometheus Books, 1999).
- Hemmick, Douglas L. and Shakur, Asif M. *Bell's Theorem and Quantum Realism: Reassessment in Light of Schrödinger's Paradox* (eBooks: SpringerBriefs in Physics, 2012).
- Humphrey, G. (1924). The Psychology of the Gestalt. *Journal of Educational Psychology*, 15(7), 401–412.
- IACFP Practice Standards Committee, "Standards for Psychology Services in Jails, Prisons, Correctional Facilities and Agencies: International Association for Correctional and Forensic Psychology," *Criminal Justice and Behavior*, 37 (2010): 749-808.
- Jackson, George. *Soledad Brother: The Prison Letters of George Jackson* (Chicago, IL: Lawrence Hill Books, 1994).
- Jakimovska, Ilina and Jakimovski, Dagan. "Text as Laboratory: Science Fiction Literature as Anthropological Thought Experiment," *Antropologija* 10:2 (2010).
- Jerome, Fred and Taylor, Roger. *Einstein on Race and Racism* (New Brunswick, NJ: Rutgers Univ. Press, 2005).
- Koerner, Michelle. "Line of Escape: Deleuze's Encounter with George Jackson," *Genre* 44:2 (Summer 2011).
- Kuhn, Thomas. *The Structure of Scientific Revolutions* (Chicago, IL: Chicago Univ. Press, 1996).
- Latour, Bruno and Woolgar, Steve. *Laboratory Life: The Construction of Scientific Facts* (Princeton, NJ: Princeton Univ. Press, 1986).
- Leyser, Yony (dir). *William S. Burroughs: A Man Within* (BulletProof Film, 2010): DVD.
- Lukacs, Georg. *The Theory of the Novel* (Cambridge, MA: MIT Press, 1971).
- Mach, Ernst. *The Science of Mechanics* (LaSalle, Illinois: Open Court, 1960): 33-41.
- McCullers, Carson. *Clock without Hands* (New York, NY, Mariner Books, 1998).
- McCullers, Carson. *The Heart Is a Lonely Hunter* (New York, NY: Bantam Books, 1963).

- McCullers, Carson. *The Member of the Wedding* (New York, NY: Mariner Books, 2004).
- McCullers, Carson. "The Russian Realists and Southern Literature" in *The Mortgaged Heart: Selected Writings* (New York, NY: Mariner Books, 2005): 252.
- Mead, Margaret. *Coming of Age in Samoa* (New York, NY: Harper Perennial, 2001).
- Metzl, Jonathan. *The Protest Psychosis: How Schizophrenia Became a Black Disease* (Boston, MA: Beacon Press, 2009).
- Moretti, Frank. *The Way of the World: The Bildungsroman in European Culture* (London, UK: Verso, 1987).
- Moten, Fred. "Black Op," *PMLA* 123:5 (2008).
- Moten, Fred. "The Case of Blackness," *Criticism* 50:2 (2008).
- Moten, Fred. *In the Break: The Aesthetics of the Black Radical Tradition*. (Minneapolis, MN: Univ. of Minnesota Press, 2003).
- Mumford, Kevin J. "Untangling Pathology: The Moynihan Report and Homosexual Damage, 1965-1975," *Journal of Policy History* 24:1 (2012): 53-73.
- Murphy, Michelle. *Seizing the Means of Reproduction: Entanglements of Feminism, Health, and Technoscience* (Durham, NC: Duke Univ. Press, 2012).
- Murphy, Timothy. *Wising Up the Marks: The Amodern William Burroughs* (Berkeley: Univ. of California Press, 1997).
- Murray, Jennifer. "Approaching Community in Carson McCullers's *The Heart Is a Lonely Hunter*," *Southern Quarterly* 42:4 (Summer 2004): 107-114.
- Norman, Brian. "'We' in Redux: The Combahee River Collective's *Black Feminist Statement*," *differences* 18:2 (2007): 103-132.
- Odier, Daniel and Burroughs, William S. *The Job: Interviews with William S. Burroughs* (New York: Penguin Books, 1989).
- Pais, Abraham. *"Subtle Is the Lord": The Science and Life of Albert Einstein*, (Oxford, UK: Oxford Univ. Press, 1983).
- Porter, Theodore M. "How Science Became Technical," *Isis* 100:2 (2009): 292-309.
- Radway, Janice. *Reading the Romance: Women, Patriarchy, and Popular Literature*

- (Chapel Hill, NC: Univ. of North Carolina Press, 1991).
- Rheinberger, Hans-Jörg. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube* (Stanford, CA: Stanford Univ. Press, 1997).
- Rudolph, John L. "Epistemology for the Masses: The Origins of 'The Scientific Method' in American Schools," *History of Education Quarterly* 45:3 (2005): 341-376.
- Savigneau, Josyane. *Carson McCullers: A Life*, Trans. Joan E. Howard (Boston, MA: Houghton Mifflin, 2001).
- Schrodinger, Erwin. "The Present Situation of Quantum Mechanics." Trans. John D. Trimmer. *Proceedings of the American Philosophical Society* 124:5 (1983): 323-38.
- Selisker, Scott. "'Simply by Reacting?': The Sociology of Race and *Invisible Man's* Automata," *American Literature*, 83:3 (Summer 2011): 571-596.
- Seltzer, Mark. *Bodies and Machines* (New York, NY: Routledge, 1992).
- Shankman, Paul. *The Trashing of Margaret Mead: Anatomy of an Anthropological Controversy* (Madison: Univ. of Wisconsin Press, 2009).
- Spillers, Hortense. "Mama's Baby, Papa's Maybe: An American Grammar Book," *Diacritics* 17:2 (1987).
- Watt, Ian. *The Rise of the Novel: Studies in Defoe, Richardson, Fielding* (Berkeley, CA: Univ. of California, 1957).
- Wells, H.G. *The Invisible Man* (Clayton, DE: Prestwick House, 2006).

6. Biography

Lindsey Catherine Andrews was born in Athens, Georgia in 1979. She studied at the University of Southern California where she received a B.A. in English in 2001. At Duke, she has been the recipient of the William Preston Few Fellowship and the Julian Price Graduate School Fellowship. She also received the Ernestine Friedl Research Award, the Race and Gender Research Award, the Women's Studies Graduate Scholars Colloquium Award, the Anne Firor Scott Research Award, and the Humanities, Arts, Science, & Technology Advanced Collaboratory Scholarship.